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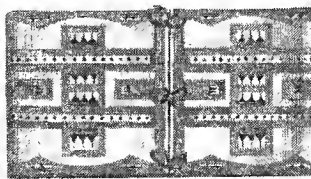
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MEMOIR 62

No. 5, ANTHROPOLOGICAL SERIES

Abnormal Types of Speech in
Nootka

BY

E. Sapir

MEMOIR 63

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Noun Reduplication in Comox,
a Salish Language of
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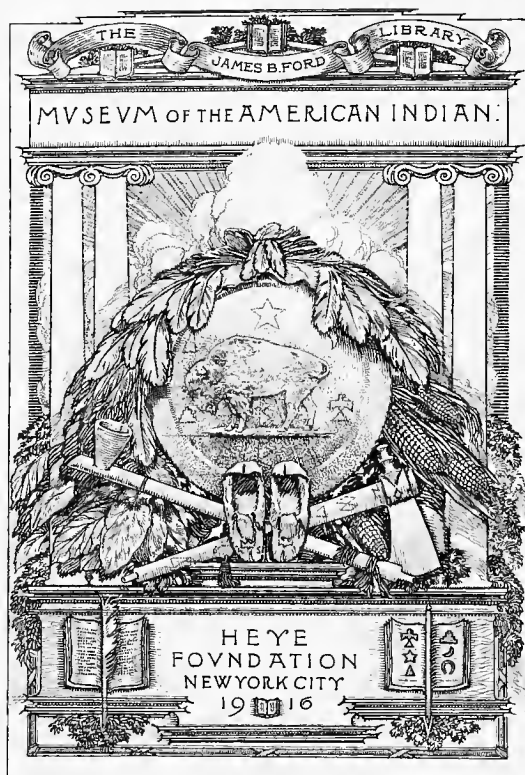
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Abnormal Types of Speech in
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Abnormal Types of Speech

in Nootka

An interesting linguistic and cultural problem is the use in speech of various devices implying something in regard to the status, sex, age, or other characteristics of the speaker, person addressed, or person spoken of, without any direct statement as to such characteristics. When we say "big dog make bow-wow" instead of "the dog barks," it is a fair inference that we are talking to a baby, not to a serious-minded man of experience. Further, when we hear one use "thee" where most would say "you," we suspect that we are listening to an orthodox Quaker. In neither of these cases is there an explicit reference to a baby as person addressed or to a Quaker as person speaking. Such implications are common in all languages and are most often effected by means of the use of special words or specific locutions. Thus, in Nootka there are special words used in speaking of obscene matters to or in the presence of women; a number of "baby-words" also exist. Generally it is the speaker or person addressed that is thus signalized, but it is quite possible, though less frequent, to thus imply something also in regard to the third person. A more specialized type of these person-implications is comprised by all cases in which the reference is brought about not by the use of special words or locutions, that is, by lexical, stylistic, or syntactic means, but by the employment of special grammatical elements, consonant or vocalic changes, or addition of meaningless sounds, that is, by morphologic or phonetic means.

To enumerate all the possible types of person-implication expressed in language, from the point of view of resulting classifications of human beings, would lead one far afield. Two types, however, seem to stand out most prominently — those referring to sex-discrimination and to rank-discrimination. Several languages make a distinction between words or forms used by males and such as are restricted to females. Such a distinction, for instance, is made by certain Eskimo dialects, in which, at least in earlier times, according to Boas,¹ final *p*, *t*, *k*, and *q*² were pronounced by the women as the corresponding nasals *m*, *n*, *ŋ*, and *ŋ*. In Yana, an isolated linguistic stock of northern California, the forms used by the women, whether in speaking to one another or to males, differ from the fuller forms used by the latter in the unvoicing of final vowels; final *-na* (*-hi* in Southern Yana), a common noun ending, is replaced by aspiration in the speech of the women, who further lengthen final vowels to express the interrogative, while the males suffix an element *-n*. Most languages that make such sex distinctions differentiate the sexes as speakers. In Yana, however, a further discriminating factor is the sex of the person spoken to, in so far as the men in speaking to the women use the forms characteristic of the latter.

More widespread in language seems to be a discrimination of forms according to the rank or social status of the person speaking, addressed, or spoken of. Here belong the etiquette forms characteristic of several East Asiatic and Indonesian languages, by which the social grading of the speakers as inferiors or superiors in reference to one another is clearly reflected in their speech. An analogous American instance is the use in Nahuatl of reverential forms to imply respect to the person addressed or spoken of. These are morphologically nothing but indirectives or causatives in *-lia*, *-tia*, or *-ltia* with reflexive pronominal prefixes; "he sleeps" is thus more politely expressed as "he causes himself to sleep." Here belongs also the use in so many European languages (French, German, Russian, and others) of second or third person plurals, instead of the more logical second person singulars, in speaking to people with whom one

¹ *Handbook of American Indian Languages*, Bulletin 40 of Bureau of American Ethnology, 1911, p. 79.

² See Phonetic Key at end of this paper.

is not on the most intimate terms. This usage has its parallel in Yana, where brothers and sisters address each other in the plural¹; other Californian examples of a similar nature have been given by Goddard² and Kroeber.³

These preliminary remarks are intended merely to indicate the general class of linguistic phenomena to which belong the more specialized Nootka examples to be given presently. At the same time they will serve to render these latter less glaringly bizarre by providing them with parallels of a more general character. The data here presented were chiefly obtained in November, 1910, in the course of ethnologic and linguistic research for the Geological Survey of Canada among the Nootka Indians of Alberni canal, Vancouver island; the informant was Dan Watts, the young chief of the *Hōpátcl'as'atn^a* tribe. Further data on this subject were obtained in the winter of 1913-14 from Alex Thomas, a young Indian of the *Ts'icá'atn^a* tribe of the same region.

It is possible and often customary in Nootka to imply in speech some physical characteristic of the person addressed or spoken of, partly by means of suffixed elements, partly by means of "consonantal play." Consonantal play consists either in altering certain consonants of a word, in this case sibilants, to other consonants that are phonetically related to them, or in inserting meaningless consonants or consonant clusters in the body of the word. The physical classes indicated by these methods are children, unusually fat or heavy people, unusually short adults, those suffering from some defect of the eye, hunchbacks, those that are lame, left-handed persons, and circumcised males.

In speaking to or about a child it is customary to add the regular diminutive suffix *-ʼis* to verb or other forms, even though the word so affected connotes nothing intrinsically diminutive; affection may also be denoted by it. The *-ʼis* comes before temporal, modal, and pronominal suffixes. Thus, the normal *qwis'tci* "do so!" (*qwis-* "to do thus," *-tci* "second person singular imperative, "go and . . . !") is changed to *qwis'istci* "do so, little one!" when speaking to a child.

¹ Sapir, *Yana Texts*, University of California Publications in American Archaeology and Ethnology, vol. 9, 1910, p. 95, footnote 139; p. 101, footnote 150.

² Goddard, *Kato Texts*, *ibid.*, 1909, vol. 5, p. 143, footnote 185.

³ Kroeber, *The Languages of the Coast of California north of San Francisco*, *ibid.*, 1911, vol. 9, p. 321 (Pomo).

Similarly, *qwisma* 'he does so' (-*ma* third person present indicative) is changed to *qwis'isma* when one is speaking about a child. In speaking about oneself or others when addressing a child, it does not seem to be customary to use the diminutive suffix except to show affection at the same time. Thus, the word *walcīLOH* 'I am going home' (*wal-* 'to return home;'' -*cīL-* inceptive; -*aH* 'I') may be changed to *walcīL'isaH* 'I am going home, little one' when addressed to a child for whom one wants to show love, but this form would not be used in speaking to a child that is a stranger. As might be expected, diminutive verbal and other forms occur in lullabies, in some of which the child is represented as speaking about itself. Thus, in a lullaby supposed to be sung by a whale mother to its child, occur the words 'OH^a'ēsqk^e :émiti' ('(my) little name is' ('OH^a- "to be;'' -'is- diminutive; -qk^e "of, belonging to;'' :émiti' "name")). Some people were said by Dan to have the habit of using the diminutive suffix in order to belittle others, as though the persons addressed or referred to were of no more importance than children as compared to themselves. If a chief does this to too great an extent, he is set down as haughty.

In talking to or about fat people or people of unusual size, the suffixed element -*aq* is used in a manner analogous to the diminutive -'is. Thus, the normal *hínt'cīLwe'in* 'he comes, it is said' (*hin-* 'empty' verb stem 'to be, do;'' -*t'*-, shortened form of -*in* 'to come;'' -*cīL-* inceptive; -*we'in* quotative) becomes *hínt'cīLaq'we'in*; 'qtsátcīLma' 'he goes to it' ('q- 'empty' noun stem meaning 'something;'' -*tša-* 'to start for, go to;'' -*tcīL-* inceptive, used after vowels; -*ma* third person present indicative) becomes 'qtsatcīLáq'ma'. Other examples are: *ha'qkwaq'ma* 'he, clumsy one, eats;'' (*ha'w-* 'to eat;'' -*qkw-* intransitive verbal suffix); and *ha'qkwáqit'hak* 'did you eat, fatty?' (-*it'* tense suffix denoting past time; -*ha-* interrogative; -*k'* second person singular).

People who are abnormally small are spoken of in forms with the diminutive suffix; moreover, in such cases, all sibilant consonants (*s*, *ts*, *ts!*; *c*, *tc*, *tc!*) become palatalized *c-* sounds (*ś*, *tś*, *tś!*; compare, for *ś*, Polish *ś* and Sanskrit *ç*; for *tś*, compare Polish *ć*), which sound acoustically midway between *s-* and *c-* sounds; the diminutive -'is itself becomes -'iś. Thus,

hint'ciLwe'in 'he comes, they say' is changed to *hint'siL-išwe'in* 'he, little man, comes, they say.' These *s*-forms are also used to refer to small birds, such as sparrows and wrens. Sometimes a meaningless *š* is added to the word, as in *wikāH^aš tōhauk'* from *wikāH^a tōhauk'* 'I am not afraid' (*wik-* verb stem 'to be not;'; *-āH^a* first person singular present indicative; *tōH-* verb stem 'to be afraid;'; *-uk'*, diphthongized to *-auk'* because of preceding *a*-timbred *H*, intransitive suffix). We shall meet this consonantal change again further on in another connexion.

Quite analogously to dwarfs, are addressed or spoken of those suffering from some defect of the eye. Under this category are included cross-eyed people, those who squint, and such as have one eye run out, but not the blind. Here again the diminutive suffix is used, with the added feature that all *s*-sounds and *c*-sounds are converted into the corresponding voiceless lateral stops or spirants (*s* and *c* become *t*; *ts* and *tc* become *L*; *ts*! and *tc*! become *L*!); the diminutive *-i* itself becomes *-iL*. This style of speech is termed *L'al/ātck/in* 'to talk in sore-eyed fashion' (cf. *L'al/ātck'sul* 'one-eyed person'). Thus, *qwišma* 'he does so' is changed to *qwiL-iLma*. Similarly, *tc!iLma* 'he cuts' (*tc!* 'to cut;'; *-tc!* inceptive; *-ma* third person present indicative) becomes *L!iL!iL-iLma*. A full-grown Indian named Sammy (or *Sé'mi* as pronounced in Nootka), who is cross-eyed, is referred to as *lě'mi'il* 'little cross-eyed Sammy.' Another Indian of the same tribe, *Tó'mic*, who has only one good eye, is, in parallel fashion, referred to as *Tó'miL'il* 'little one-eyed Tó'mic.' It should be remarked that such people, particularly when adult, are apt to become offended if addressed in this fashion, and that one would not use such forms in their presence unless with the express purpose of showing contempt or of teasing. As will be seen again later on, *L'al/ātck/in* forms are used also in referring to the deer¹ and mink. Thus, the mythological Mink, *tc!āsti-mits'mit* 'Mink-son,' is generally referred to as *L!ātti-miL'mit*.

Hunchbacks (*k!wápi*) are also addressed or spoken of in forms provided with the diminutive suffix, a further peculiarity in these being the change of ordinary *s*-sounds and *c*-sounds

¹ Deer is associated with sore eyes also in other Indian mythologies. An Ojibwa example may be found in P. Radin, *Some Myths and Tales of the Ojibwa of Southeastern Ontario*, Geological Survey of Canada, Memoir 48 (No. 2, Anthropological Series), p. 3 (episode d).

to peculiar thickish *c*- sounds, pronounced with the lower jaw held in front of the upper; the diminutive *-is* appears as *-iç*. We may represent these *c*- sounds by *ç*. In this hunchback talk *qwisma* becomes *qwiç'içma*. Other examples are: *yâtçuk-içma* "he is walking" (*yâts*- "to walk;" *-uk*- intransitive verb suffix); *tç!ôtk'miniçma* "all of them are" (*tç!ôtk*- "to be all;" *-miniç*- plural); and *tç!âççil'içma* "he spears" (*ts!ax*- "to spear"; *-çil*- inceptive). Here again these distinctive forms are generally avoided when in the presence of hump-backed people, for fear of giving offence. However, a hump-backed child who is well known to the speaker would hardly take offence and would be addressed as described. Or, if an old humpbacked woman is good-natured, *ç*- forms may well be used when she is about, as though to show that she is happy and not easily ruffled. Here the notions of contempt and affection commingle.

In speaking of lame people the diminutive suffix is again used, this time in its normal form. Besides this, the meaningless element *LC* or *Lci* is inserted in the body of the word somewhere before the diminutive suffix, its exact position apparently depending on the whim of the speaker. Thus, *hinini'alma* "he comes now" (*hin*- "empty" verb stem; *-ini*- "to come;" *-al*- determinative suffix marking point of time, "now"; *-ma* third person present indicative) becomes *hininiLCi'its!alma* (diminutive *-is* and *-al* regularly combine to form *-its!al*) or *hiLCini'its!alma* "the lame chap is coming." Similarly, the verb *tç!itç'alma* "he cuts now" (inceptive *-tçil* and *-al* combine into *-tçi'al*) is changed to *tç!itçilLCi'its!alma* when a lame person is spoken of. The word *t!a'né'is'i* "the child" (*t!a'na*- "child, son, daughter;" *-is* diminutive suffix, *i* causing preceding *a* to become unlauded to *e*; *-i* nominalizing element, about equivalent to our definite article) becomes *t!alcné'is'i* "the young lame fellow," which may be used in speaking to children.

In speaking of or to left-handed people the diminutive suffix is used in its normal form, besides which the meaningless element *tçH* is inserted after the first syllable of the word. Thus, *yâl'alma* "there now he is" (*yâl*- "to be there;" *-al* and *-ma* as above) becomes *yâl'tçH'its!alma* (*-is* and *-al* combine to form *-its!al*) "there now he is, poor little left-handed chap!"

Similarly, from *sukwi'alma* "now he takes it" (*su-* verb stem "to take;" *-kwiL* inceptive suffix, changed to *-kwi-* before *-al*) is formed *sútch^akwiL'its'alma*. The diminutive suffix may also be omitted. Examples are: *hitch^anínⁱ* from *hinínⁱ* "to come"; and *t!itch^atcilAH* from *t!itcilAH* "I throw it down" (*t!i-* "to throw;" *-tcil* inceptive suffix; *-aH* first person singular indicative). Such a form as the last might be appropriately used in speaking to a left-handed person that one is well acquainted with and who will not take offence at being thus twitted. It is customary, particularly for jokers, to use these left-hand forms also in talking about bears, who are supposed to be left-handed.¹

In speaking of or to circumcised males, forms known as *'i'ict'k/inⁱ* "to make *ct'* sounds" are used. In these the meaningless element *ct'* is inserted after the first syllable of the word. One of the *Ts!icā'ath^a* Indians, named *T!óxmis* "Slaying-while-moving-from-beach-to-beach," is often humorously referred to as *T!óctxmis* because of his having been born circumcised. Other examples of this class of forms are: *hict'nínima* from *hinínima* "he comes;" and *háct'ók'u* from *há'ók'u* "to eat."

Similar phonetic changes are made in forms used to refer to one or two classes of individuals characterized by some mental quality. Thus, greedy people are addressed or referred to in forms having a meaningless *tcx* inserted after the first syllable of the word. Thus, from *'oh^asāmah* "I hunger for it" (*'o-* "empty" stem which may be rendered by "something" or "so and so;" *-h^asā-* verbifying suffix "to desire to eat;" *-mah* first person singular present indicative, used after vowels) is formed *'utcxhsāmah*. Similarly, *hinínⁱ'alma* "now he comes" becomes *hictxnínⁱ'alma* "now he comes, greedy fellow that he is." These *tcx-* forms are also used to refer to ravens, regularly to the mythological Raven, a character noted for his gluttony.

Cowards may be satirized by "making one's voice small" in referring to or addressing them, in other words by speaking in a thin piping voice that suggests timidity.

It is interesting to notice that in several of the above usages, the notions of mere smallness, of contempt, and of affection are found side by side, and doubtless the precise nuance of feeling expressed depends much on the relations subsisting between

¹ According to Dr. Paul Radin, the Winnebago also consider the bear to be left-handed. In the bear clan feast of these Indians the guests eat with a spoon in their left hand.

the speaker and the person addressed or spoken of. What is meant in the spirit of pitying affection for a poor lame or hump-backed child or for a good-natured squinting old grandpa, might be intended to convey contempt when addressed to a young man and would be promptly resented as an insult. It is significant that the various types of abnormal forms of speech that we have reviewed are used with little or no reserve when speaking of the persons referred to or when addressing children, but are, on the whole, avoided when within ear-shot of adults so referred to. It seems further significant that the traits satirized are chiefly such as are inherent in a person, not merely acquired in the accidental course of events, whereby he is set apart by nature as falling short in some respect of the normal type of individual and is to that extent stamped as inferior. This may explain why blindness, which is more often acquired rather late in life than congenital, is not made the subject of speech-mockery. Added to this may be the feeling that blindness is too grave an affliction to be treated light-heartedly, an explanation which gains weight when the well-known sensitiveness of the Indian is considered.

Outside of the normal use of the diminutive in addressing or referring to children, the peculiar forms of speech that we have seen to obtain in Nootka are not easily paralleled in America. For diminutive verbal forms of the Nootka type Uto-Aztekan affords a close parallel. In Southern Paiute the regular diminutive suffix *-tsi-*, which is employed to form diminutive nouns and adverbs of all sorts, is also used as a verb suffix when speaking to or of a child. Cognate with this element is the diminutive suffix *-tzin(tli)* of Nahuatl. Derived from this is the verb suffix *-tzinoa*, "which," according to Rémi Siméon,¹ "serves to denote respect or love;" it is generally, like reverentials of the type already referred to, employed with reflexive prefixes. Examples given by Rémi Siméon are: *otechmo-chiuitzino* in *Totecuyo* "our Lord created us" (*o* preterit prefix; *tech-* first person plural objective prefix; *mo-* third person reflexive prefix; *chiui-*, from *chiua*, because of following *-li-*, verb stem "to make;" *-li* dative suffix, *mo-* . . . *-li* "for himself;" *-tzino* reverential, final *-a* being dropped because of preterit

¹ Dictionnaire de la Langue Nahuatl ou Mexicaine, s. v. *tzinoa*.

tense; *in* definite article, "the"; *to-* first person plural possessive prefix; *tecuyo* noun stem "lord"); and *timo-çauhtzinoa* (quoted from Olmos) "you fast" (*ti-* second person singular subject; *mo-* reflexive;¹ *çauh-*, from *çaua* verb stem "to fast;" *-tzinoa* reverential). These forms may be rendered in some such fashion as: "our Lord has created us for himself, revered one," and "you fast, honoured sir."

Strikingly similar psychologically to the cases of consonantal play in Nootka just considered are the peculiar consonant changes characteristic of Chinookan, employed to convey diminutive and augmentative notions respectively in all parts of speech.² The change here of *c-* consonants to *s-* consonants to express the idea of diminution further illustrates the tendency of sibilants in America to be subject to consonantal play. In Yana the phenomenon of diminutive consonantism is illustrated in the change of *l* to *n*. This process takes place regularly in forming diminutive nouns in *-p!a*; thus, *n̄nimaup!a* "little nose," from *l̄l̄l̄mau(na)* "nose." The *l-n* type of consonantal play is another one of some currency in America, and seems to obtain also in Sahaptin. This matter of consonantal play to express modalities of attitude is doubtless a fruitful field for investigation in American linguistics and should receive more attention than has hitherto been accorded it. It may be expected to turn up particularly in connexion with notions of smallness, largeness, contempt, affection, respect, and sex-differences.

Such consonant changes and increments as have been considered are evidently of a rhetorical or stylistic as much as of a purely grammatical sort. This is borne out by the fact that quite analogous processes are found employed as literary devices in American myths and songs. I have already drawn attention to the fact,³ that in American mythology certain beings are apt to be definitely characterized by speech peculiarities. The employment of consonantal play or of similar devices in such cases seems always to have a decidedly humorous effect.

¹ This verb is intrinsically reflexive.

² See Sapir, *Preliminary Report on the Language and Mythology of the Upper Chinook*, *American Anthropologist*, N.S., 9, 1907, pp. 537, 538; and, in greater detail, Sapir, section on "Diminutive and Augmentative Consonantism in Wishram," in Boas, *Handbook of American Indian Languages*, pp. 638-645.

³ Sapir, *Song Recitative in Paiute Mythology*, *Journal of American Folk-Lore*, XXIII, 1910, pp. 455-472. Takelma, Ute, Chinookan, and Nootka examples are there given, p. 471.

The culture-hero *Kwátiyāt'* of Nootka mythology is in the habit of inserting a meaningless *x* after the first vowel of a word; thus, the normal form *h̄nuse'i* "come up out of the water!" (*h̄n*- empty stem "to do, be;" -*use*-, unlauded from -*usa*- because of following *i*, "to move up out of the water;" -*i*' imperative singular) becomes, at the same time, inasmuch as it occurs in a song, with song-vocalism, *h̄x̄nusa'ê*. In the speech of the Deer and Mink all sibilants, whether of the *s* or *c* series, are transformed into the corresponding laterals (*s* and *c* to *l*, *ts* and *tc* to *L*, *ts'* and *tc'* to *L'*). Thus, the Deer says *l̄m̄l* for *tc̄lm̄is* "black bear;" *L'ápal* for *tc'ápat* "canoe." The Nootka Deer and Mink style of talking is of particular interest for two reasons. In the first place, it will have been noticed that the consonantal changes are identical with those employed in speech about or addressed to those that have some defect of the eye, the latter type of forms, of course, being further characterized by the use of the diminutive suffix -*'il* (from -*'is*). Here we see at once the intimate connexion between the two types of consonant play. In the second place, the speech of the Nootka Deer and Mink offers an interesting parallel, or rather contrast, to that of the Kwakiutl Mink. This latter character regularly transforms all laterals to corresponding *s*- sounds (*l*, *L*, *l*, and *L'* become respectively *s*, *ts*, *dz*, and *ts'*), the exact reverse of the Nootka process. From the point of view of the psychology of phonetics, it is significant to observe that both Nootka and Kwakiutl have a feeling for the interchangeability of the sibilant and lateral series of consonants. But the Mink of the Kwakiutl is not content with this. He also regularly transforms all anterior palatals to corresponding sibilants (*x̄*, *k̄*, *ḡ*, and *k̄'* become respectively *s*, *ts*, *dz*, and *ts'*). There are still other phonetic changes to be found in Boas' Mink texts, but they seem less regular in character than these two; the changes at times of *l* and *'l* to *y* and *'y* may be instanced as one of these (thus *s̄e'ȳê* for *l̄e'l̄ê* "dead").¹ Now it is perhaps significant that the change in Kwakiutl of anterior palatals to sibilants is curiously like the change of original Wakashan (Kwakiutl-Nootka) anterior palatals, as preserved in Kwakiutl,

¹ For data on Mink's peculiarities of speech, see F. Boas and G. Hunt, *Kwakiutl Texts — Second Series*, Publications of the Jesup North Pacific Expedition, vol. X, 1906, footnotes on pages 82 to 154; and Boas, *Kwakiutl Tales*, Columbia University Contributions to Anthropology, volume II, 1910, footnotes on pp. 126-154.

to *c*- consonants in Nootka.¹ Thus, a Mink form *nɛdzɛ* in Kwakiutl for normal *nɛgʔɛ* "mountain" is strikingly similar to the regular Nootka cognate *nutci*'. Suggestive also, à propos of the use by Mink of sonant palatal spirants (*y* and *'y*) for normal sonant laterals (*l* and *'l*), is the fact that in Nootka so-called "hardening" suffixes change immediately preceding *l* to *'y*, corresponding in such cases to Kwakiutl *'l*.² The bearing of these facts on mythological consonant play in Kwakiutl is not easy to determine; a possibility will be suggested farther on.

Consonant play as a device in mythology is not confined to America. In reading some recently published Bushman literature the writer came across striking parallels. The Bushman Mantis, who, like the Kwakiutl Mink, is a trickster, consistently changes all the cerebral clicks of normal speech into lateral clicks.³ Similarly, the Baboon transforms all the clicks of ordinary speech into a compound click, consisting of cerebral followed by dental click.⁴ Evidently a comic effect is aimed at in both these cases.

The phenomenon of consonant and vocalic play is also well illustrated in Indian songs. Song diction is an extremely important, though rather neglected, field of primitive lore, and only one phase of it can be touched on here. Song texts often represent a "mutilated" form of the language, but study of the peculiarities of song forms generally shows that the normal forms of speech are modified according to definite stylistic conventions, which may vary for different types of songs. Sometimes sounds are found in songs which do not otherwise occur in the language. Where the texts of a type of songs are in the language of another tribe, as happens so often in America, such an abnormal sound may be simply borrowed from the foreign language, as is the case with the mourning songs of the Southern Paiute, which, sung to supposedly Mohave texts, contain many examples of *l*, a sound otherwise unknown in Paiute. On the other hand, new sounds may be developed spontaneously or in imitation of foreign sounds. The former is probably the case in the frequent

¹ See Sapir, *Some Aspects of Nootka Language and Culture*, American Anthropologist, N.S., 13, 1911, p. 16.

² See Boas, *Handbook of American Indian Languages*, pp. 430, 435; Sapir, *loc. cit.*

³ Bleek and Lloyd, *Specimens of Bushman Folklore*, 1911, footnotes on pp. 6 and 8.

⁴ *Ibid.* Footnotes on pp. 18 and 22. At least this is indicated by Bleek's orthography, though possibly the compound sign is meant to indicate a special click not otherwise found.

Nootka use of η , a sound quite foreign to normal Nootka speech, in certain classes of songs; the latter explanation is more plausible in the case of the regular Nootka change of n to l in many songs. This n - l interchange, again, is significant in so far as Kwakiutl, doubtless agreeing in this respect with primitive Wakashan, has both n and l , while Nootka, when cognate words are compared, is seen to have only n to correspond to both. Of particular interest in this connexion is the fact that such special song-sounds (Paiute l ; Nootka l and η) are, at least so it would seem, pronounced with difficulty by Indians under ordinary circumstances, as in the handling of English words that contain them. The obvious inference is that one may react quite differently to the same speech-sound entering into dissimilar associations. This fact, has, of course, a much wider psychological significance.¹ Conventional consonant changes in songs are no more restricted to America than, as we have seen, are parallel changes in mythology. An example that happens to have come to the writer's attention lately is the change of voiceless stops to corresponding nasals plus voiced stops in the songs of the Karesau-Papua of German New Guinea. Thus, the normal *apil* becomes *ambil* in songs.²

In seeking some comparatively simple basic phenomenon, from which, as a starting point, the various types of consonant play we have illustrated from Nootka could have originated, one easily thinks of the vocalic changes or consonant substitutions that take place in the speech of those who have some specific speech defect. The most familiar case of this sort in English is lisping, which simply means that the ordinary alveolar sibilants (sometimes also stops) are changed to the corresponding dental sibilants or even interdental fricatives (and sometimes correspondingly for stops). Information was obtained of five types of speech defects found among the Nootka. The first of these is called *ninik'in* (*nini*-reduplicated stem; *-k'in* "to make a sound of") and consists of the involuntary

¹ Sounds falling outside the regular phonetic system of the language may be spontaneously developed also by the operation of other systems of consonantal (or vocalic) play than are found in song diction. Thus, in Wishram (Upper Chinookan), the analogy of certain consonant changes of augmentative value (as of p to b , t to d , k to g) brought about the creation of dj , a sound otherwise unknown in Chinookan, as the augmentative correlate of te or ts sounds. See *Handbook of American Indian Languages*, pp. 638, 639, 640.

² See Father W. Schmidt, abstract of *Über Musik und Gesänge der Karesau-Papuas*, *Deutsch Neu-Guinea*, Bericht über den III. Kongress der Internationalen Musikgesellschaft, 1909, p. 297.

nasalizing of all vowels and continuants. Thus, the normal *hayǎ'akaH* "I do not know" (-aH first person singular present indicative) is pronounced by people who have this defect *hayǎ'ǎkqH*. The father-in law of Dan Watts, who is a Ucluelet Indian that came to visit his son-in-law, was observed by the writer and definitely stated by Dan to have this "nasal twang," which is due to an inability, muscular or nervous, to raise the velum so as to shut off the passage of the outgoing breath through the nose. In speaking of the elk, *nínik/iní* forms are used.

A second type of defective articulation is termed *hahát'k/iní* or *hahát/iní* (*hahat'*- reduplicated stem; -*k/iní* "to make a sound of"), and is supposed to be due to a hole in the palate. I have no clear idea as to just what the organic basis of the faulty articulation is, but, judging from the examples given of it, it seems evident that those subject to it have difficulty in articulating against the hard palate. Perhaps the speech defect is due to cleft palate. All *ts* and *tc* affricatives (presumably also lateral affricatives) become simple *t*- sounds (dental), while *s*, *c*, and *l* become interdental fricatives (*θ*). The acoustic effect is that of an exaggerated lisp. Thus, *tc!ǎtck'* "all" becomes *t!ǎt'k'*; '*ǎtsí'yukwaH* "I go to it" ('ǎ- empty noun stem "something"; -*tsí'yukw*- "to go to;" -aH "I") becomes '*ǎtí'yukwaH*; and *tc!ǎp'tc!ǎp'cimil* "stretch around the neck; sweater" (*tc!ǎp'tc!ǎp'c*- reduplicated stem; -*imil* "at the neck") becomes *t!ǎp't!ǎp'θimilθ*. This latter rests on the authority of Dan Watts; Alex Thomas, starting from a form *tc!ǎp'tc!ǎp'cimil* for "sweater," gave *t!ǎp't!ǎp'timil* as its *hahát/iní* correspondent. Those who are *hahát'k/iní* thus confound three distinct series of consonants in a single dental or interdental series. Such persons are imitated when addressed. The outward resemblance with the phenomena of consonant play is quite striking here.

This resemblance becomes even stronger in the case of the third Nootka speech defect of which information was obtained, that known as *tsǎska'* (*tsǎsk*- verb stem; -*a'* verb suffix of continuative significance) or *tsǎskaq'sul* (*tsǎsk*- verb stem; -*aq'sul*, perhaps misheard for -*ak'sul* "at the lips"). Such as are subject to it are supposed always to keep their teeth open and to be saying *ts+*. As a matter of fact, those who are *tsǎska'*

change all *s* and *c*- sounds to palatalized sibilants (*š*). Thus, 'ot*š*i'yukwan "I go to it" becomes 'ot*š*i'yukwan; *š*i'yāsan "it is mine" (*š*i'yās- "to be mine," from independent pronoun *š*i'ya' "I;" -a*н* first person singular present indicative) becomes *š*i'yā*š*a*н*. It will be remembered that these consonant changes are characteristic of the forms used in addressing or speaking about abnormally small adults, except that such discourse is further characterized by the use of the diminutive suffix -'i*š* (from -'is). Here there is a tangible connexion between the involuntary consonant changes brought about by a speech defect and the consonant play used to symbolize a body defect, though it is far from obvious in this particular case what association there can be between a kind of lisp and a dwarfed condition of the body. A further point of interest is that those who are *tš*i*š*ka' are generally imitated when spoken of. The significance of this in the argument is obvious.

Somewhat similar to the *hahát/in*ⁱ speech defect, yet not to be confused with it, is that known as *kakát'*winⁱ "to talk as one with missing teeth" (cf. *kát*xwak'sul "to have teeth missing in one's mouth"). Such persons speak with a decided lisp, substituting *θ* for *s* and *c*, *tθ* for *ts*, *tθ*! for *ts*! and *tc*!, but, it would seem, *t* for *tc*. Examples are: 'é'pin*θ* from 'é'pin*s* "apples;" 'ó'yinta*θ* from 'ó'yint*cas* "oranges;" *t*im*θ* from *tc*im*s* "bear;" *tθ*!ō*tk*' from *tc*!ō*tc*k' "all;" *tθ*!ápat*θ* for *tc*!ápat*s* "canoe" (contrast the corresponding *hahát/in*ⁱ form: *t*!ápat'). Here again, one who is afflicted with this speech defect is imitated when addressed; thus, Alex Thomas, before he had caps put on his vestiges of teeth, used to be mocked *kakát'*winⁱ-fashion.

A fifth, not uncommon, speech defect among the Nootka is stuttering. Stutterers, like all other persons who have something abnormal about their speech, are derided by being imitated.

The West Greenland speech defect known as *kutāt'oq*¹ is particularly instructive in that an individual speech-peculiarity, which, however, seems to be a common one in the Eskimo settlements along the coast, has become one of the dialectic peculiarities of the northern settlements of the Upernavik district. The *kutāt'oq* habit consists in substituting ordinary gutturals (*k*- sounds) for velars (*q*- sounds), and is evidently due

¹ See W. Thalbitzer, *A Phonetical Study of the Eskimo Language*, Meddelelser om Grønland, XXXI, 1904, pp. 178-180.

to the greater difficulty of bringing about a contact between the root of the tongue and the velum than farther front in the mouth. This defect, it should be noted, brings with it the confusion of two etymologically distinct series of consonants with resulting grammatical or lexical ambiguities, at least theoretically. In this respect *kutāt'oq* forms are parallel to the forms resulting in Nootka from speech defects or the use of consonantal play. Children are particularly apt to be *kutāt'oq*, but generally lose the habit as they grow older. However, certain adults, particularly women, always remain *kutāt'oq*, whether because of the mere force of habit or because of a physiological or anatomical impediment. As for the Upernavik peculiarity, it seems clear that the *kutāt'oq* habit can hardly be due to the individual disability or carelessness of all the members of the district, but that what was originally a speech defect has become socialized into a dialectic peculiarity. The analogy with the forms employed in Nootka in speaking of or addressing certain classes of people that are ill-favoured by nature is striking.

The explanation and genesis of the various types of speech mutilation in Nootka can hardly be more than guessed at, yet certain probabilities, in part already suggested, seem to stand out. In the first place, the use of definite morphological elements to indicate some characteristic of the person spoken to or of (Nootka *-'is* and *-aq'*; Paiute *-tsi-*; Nahuatl *-tzinoa*) needs no particular comment, at least from the purely linguistic point of view. Further, definite points of contact have been established between speech defects and "mocking-forms," with consonantal play, on the one hand, and between the latter and myth-character forms with consonantal play, on the other. I am inclined to believe that the observation of consonant substitutions such as take place, with involuntarily humorous effect, in the speech of those that articulate incorrectly, has set the pace for the consciously humorous use of the same or similar substitutions in both mocking and, directly or indirectly, myth-character forms. The Nootka mocking-forms, with their use of the diminutive affix and of consonant play, represent a combination, both linguistically and psychologically, of the pity and affection symbolized by the use of the diminutive element and of the contempt or jesting attitude implied by the

imitation of a speech defect. A myth character whom it is desired to treat humorously may, among other possibilities, be relegated either to the class of poor talkers or to that of nature's step-children. Hence the consonant play of such characters is in part traceable either to speech defects or to mocking-forms. In passing it may be observed that the "enfant terrible" motive is fairly clear in the treatment of many humorous characters of American mythology, and that consonant play may in some cases be taken to symbolize this attitude. The socializing of the *kutāt'oq* habit among certain of the Eskimo forcibly suggests the influence of the speech of children as a contributing factor in the creation of myth-character forms. The Kwakiutl Mink is a very likely example of the "enfant terrible," both in action and speech. The possibility should not be lost sight of, of the use of myth-character forms to apply to a class of people or to an individual in ordinary life. This would be an extension of the well-known American Indian habit of comparing one that is marked by some peculiarity of temper or habit with a favourite mythological character.¹

There is, however, another factor which has undoubtedly exercised a great influence both on the forms of speech used by myth-characters and on the forms peculiar to songs. This is the comic or novel effect produced by the imitation of the speech of foreigners, particularly of such as speak a dialect divergent enough from the home-dialect to be funny or impressive, yet not so different as to be unintelligible and, therefore, lacking in interest. Hence we often find mythological characters in America making use of a neighbouring dialect of the language, as in the case of the Nass River *Txāmsēm* and other characters, who talk in the dialect of the Tsimshian proper of Skeena river.² Examples of songs whose texts are in a divergent dialect, not to speak of the common use of a totally distinct language, are frequently met with in and out of America. A well-known instance is the use by Melanesian tribes, according to Codrington, of the dialect of some neighbouring tribe for their own song diction; thus, the Melanesians of Mota (Norfolk

¹ A few interesting examples are given by A. Skinner, *Notes on the Eastern Cree and Northern Saulteaux*, Anthropological Papers of the American Museum of Natural History, vol. IX, 1912, p. 82.

² See Boas, *Tsimshian Texts*, Bulletin 27 of Bureau of American Ethnology, 1902, pp. 8, 18, 20, 30, 35, 46, 61-64, 78, 171.

island of Banks islands) use for their songs the dialect of Saddle island. Also in the clownish episodes of rituals, which are so characteristic of America, the impersonation and imitation of the speech peculiarities of foreigners are often resorted to and never fail to arouse a hearty laugh. In all these cases, it is rather important to observe, real accuracy of imitation is not generally attained or even aimed at, so that the foreign style often tends to reduce itself to a number of conventional vocalic and consonantal displacements. In dealing above with the change of anterior palatal *k*- sounds to *ts*- sounds in the language of the Kwakiutl Mink, I pointed out that a similar change was involved in the passage of original Wakashan anterior palatal *k*- sounds to Nootka *tc*- sounds. It is just possible that the Mink *ts*- sounds are in such cases due to an imitation of the speech of the northern Nootka tribes. The difficulty with this interpretation is that Nootka and Kwakiutl are altogether too divergent to afford more than a quite inconsiderable number of illustrative cases of the *k*- *tc* change, and of these but few would strike the naïve mind. It seems more plausible, on the whole, to assume that both the Mink and Nootka consonant changes rest on a common Kwakiutl-Nootka tendency, perhaps a tendency on the part of children to pronounce anterior palatals as sibilants. Data on the speech peculiarities of Kwakiutl children would be valuable here.

The Nootka Indians of one tribe frequently imitate the real or supposed speech peculiarities of those belonging to other Nootka tribes, the stress being primarily laid not so much on peculiarities of vocabulary and grammatical form as on general traits of intonation or sound articulation (cf. our New England "nasal twang" and Southern "drawl"). For the purposes of this paper the Nootka now spoken by the *Ts'icâ'atH^a* and *Hōpâtcl'as'atH^a* of Barkley sound and the head of Alberni canal may be taken as the normal form of Nootka speech; this is, of course, purely arbitrary, but so would any other point of departure be. It is instructive to note that one or two of these tribal speech peculiarities coincide with individual speech defects.

According to the *Ts'icâ'atH^a* Indians, the *houcúq'lis'atH^a* tribe of Uchucklesit harbour, a western inlet of Alberni canal, speak or spoke (for there are few of them left now) in a rumbling fashion

(*ʔ!qL!q:énʔ*); they are said to use their throat more than the other tribes. The peculiarity referred to seems to be a more than ordinary use of velar resonance, due to a tightening of the passage between the root of the tongue and the velum or perhaps the throat.

The *Hō:ái'atH^a* Indians of Sarita river and the southern shore of Barkley sound are said to speak *L!áL!atc!inʔ*, a spluttering effect being apparently referred to. As far as can be made out, their speech peculiarity consists in a more liberal use of *tc* sounds than ordinarily. Thus, according to Alex Thomas, the *Hō:ái'atH^a* say *'nátccil* instead of *'náccil* "to look at" (as a matter of fact, this usage is probably etymologically justified, as *'nac-* and, in other forms, *'nate-* are both used as verb stems in *Ts!icá'atH^a* itself); instead of pronouncing *tc!ayfʔis* "give me water" (*tc!a-* noun stem "water;" *-yí-* verbifying suffix "to give;" *-is* second person singular imperative with first person singular object) they say something like *tc!atcyfʔis*, though Alex maintained that it was not a full clear-cut *tc* that was inserted. At any rate, the *Ts!icá'atH^a* have seized upon the *tc-* insert as a convenient means of poking fun at their *Hō:ái'atH^a* kinsmen, using it in ways that are certainly not, nor meant to be, accurate renderings of the tribal peculiarity. Thus, the tribe itself is humorously referred to as *Hōtc:ái'atH^a*; *Numáqemiyis*, the main inlet of their country, is similarly termed *Nutcmáqemiyis*. Evidently, we have here an example of a mocking usage, based on a tribal peculiarity, that is in form perfectly analogous to certain myth character and cripple-mocking usages (cf. inserted *x* for Kwatiyāt and inserted *tcH^a* for left-handed people.)

The northern Nootka tribes, beginning with the *La'ókwi'atH^a* of Clayoquot sound and proceeding north, are said to speak *tāhtāH^a*, which refers to a drawling or long drawn out manner of talking. Apparently the peculiarity, which is often imitated in jest, consists not so much in lengthening out vowels as in a somewhat exaggerated rise in pitch towards the end of a sentence, which gives the flow of speech a sliding cadence. The most northern Nootka tribe, the *Tc!ɪ'q'lis'atH^a*, are said to be all stutterers and are accordingly imitated in jest.

In imitating the Nitinats (*Nitina'atH^a*), a group of Nootka tribes to the south of Barkley sound that speak a very divergent

dialect, the meaningless syllable *-aq'* is always added to the word, as this syllable is supposed to be a very common one in Nitinat. This device is strikingly similar to the use of suffixed *-aq'* for large persons.

The real old *Hōpátc!as'atH^a* Indians, whose earliest homes were in the interior of the island along Somass river and about Sproat and Great Central lakes, were said to talk *tsiska'*, that is, to confound *s* and *c* sounds. As we have seen, this is also a well-recognized individual speech defect among the Nootka. In the case of the *Hōpátc!as'atH^a*, the *tsiska'* habit was simply due to the fact that they carried over into Nootka speech a linguistic peculiarity found in the Salish dialect which they originally spoke (a dialect apparently identical with or closely related to Boas' *Pénlatc*; recognized as *Pinl!á'atc* by Tyee Bob, the leading man among the *Hōpátc!as'atH^a* to-day and whose father is still remembered to have spoken *tsiska'*).

As for the *Ts!icā'atH^a* themselves, they are said by the other tribes to talk very fast. If one anywhere among the Nootka Indians talks too fast, the proverbial saying is that he is a *Ts!icā'atH^a*.

It will, as we have seen, have to be admitted, that mocking forms for various classes of people are connected not only with speech defects and mythological devices, but, to a large extent, also with tribal speech peculiarities.

Finally, the possibility of a direct psychological relation between the consonant change and the type of individual or attitude it symbolizes should not be summarily ruled out of court. That such an association once established by historical causes will be felt as a direct and simple psychological association is quite obvious, also that it may become productive, by analogy, of further associations of a related sort. I would, however, even be inclined to suppose, though proof may be difficult or impossible, that certain associations of sound and character or form arose more or less spontaneously, or, to put it more correctly, by virtue of the inherent associative value of the otherwise unconnected phenomena in the mind of a particular individual or group of individuals. Such an individual association, if given outward expression, can become socialized in the same way in which any individual idea becomes socialized.

The type of association here thought of is quite parallel to the sound-colour associations familiar enough in psychology. It may be not uninteresting as a psychological datum to note that the writer himself feels, or thinks he feels, the intrinsically diminutive or augmentative value of certain consonant changes in Wishram. Moreover, the association of *c*-consonants with humpbackedness in Nootka seems not so far-fetched after all. The thickish quality of these consonants, together with the protrusion of the lower jaw in pronouncing them, suggests to me the same squat clumsiness as the image of a hunchback. All this may, of course, be merely auto-suggestion *ad hoc*.

To summarize, evidence has been presented of the historical connexion between various linguistic and stylistic processes involving the symbolic use of sounds. These are diminutive and augmentative forms of speech, mocking-forms, myth-character and animal forms, and song forms. Moreover, further evidence has been presented to show the historical connexion of these quite specialized tricks of language with the far simpler phenomena of speech defects, children's language, and imitation of the phonetic peculiarities of foreigners. The direct association of some of the former with the types they symbolize, after the manner of primary association between data of distinct sense, has also been suggested as a possibility.

The data brought forward in this paper as to the associations obtaining in Nootka between various classes of persons, mythological beings and animals, linguistic devices designed to satirize or characterize, speech defects, and tribal speech peculiarities, may be most conveniently grouped in tabular form. The arrangement in the table is intended to emphasize the purely linguistic similarities.

Phonetic Key.

a, short as in German *Mann*; *e*, short and open as in English *met*; *i*, short and open as in English *it*; *o*, short and open as in German *voll*; *u*, short and open as in English *put*; *ε*, short and close as in French *été*; *ι*, short and close as in French *fini*; *ο*, short and close as in French *chaud*.

ā, long as in German *Bahn*; *ē*, long and close as in German *See*; *ī*, long and close as in German *Sie*; *ō*, long and close as in

Type of person.	Mythological being or animal.	Tribe.	Linguistic peculiarity.	Native term for linguistic peculiarity.	Speech defect.
Child; grown-up person to whom little respect is paid			Add diminutive -'is		
Large person			Add augmentative -aq'		
		Nitinat	Add meaningless -'aq'		
Abnormally small person.	Small birds (sparrows, wrens)	Hōpātcl'as'atH ^a	Add diminutive -'is (for first 2 columns); change s and c sounds to š sounds	tsiska'	Confounding s and c sounds in one š-series
Sore-eyed persons (cross eyed; squinting; having one eye run out)	Deer; Mink		Add diminutive -'i; change s and c sounds to š sounds	l'azl'atcl'in ⁱ	
Hunchback			Add diminutive -'i; change s and c sounds to ç sounds		
Lame person			Add diminutive -'is; insert lc		
Left-handed person	Bear		Add diminutive -'is; insert lcH ^a		
Circumcised person			Insert ct'	'i'ict'klin ⁱ	
Greedy person	Raven		Insert tcz		
	Culture hero Kwátiyāt'		Insert ç		
		Hō:di'atH ^a	Insert lc	l'azl'atcl'in ⁱ	
	Elk		Nasalize vowels of word	níniklin ⁱ	Involuntary nasalizing
Coward			Talk in thin, piping voice		
		Tcl'i'q'lis'atH ^a	Stutter		Stuttering
		Houtcūq'lis'atH ^a	Talk with velar resonance	l'qLl'q:én ⁱ	
		All Nootka Indians from La'ókwi'atH ^a north	Talk with drawling cadence	tāHtāH ^a	
		Ts'icd'atH ^a	Talk very fast		
			Pronounce L ts, and lc sounds as š sounds; s, c, and t as θ	hahdt'in ⁱ , hahdt'klin ⁱ	Cleft palate
			Pronounce s sounds as θ sounds; c and tcl as θ and tθ; tc as t	kakdt''wini	Lisping due to missing teeth

German *roh*; *ê*, long and open as in French *fête*; *ô*, long and open as in English *saw*, yet with back of tongue not so low.

ɤ (Kwakiutl), short obscure vowel like *e* of German *Rose*; ɪ (Nootka), short open *i*-vowel of rather unclear quality; ʔ (Nootka), occurring as syllabic final after *n* and *m*, barely articulated or murmured (yet not voiceless or whispered) ɪ; ° (Nootka), denotes *a*-timbre of preceding *h* (see below).

c, like *sh* in English *ship*: *tc*, corresponding voiceless affricative, *ch* of English *church* (in Nahuatl *ch* is used for *tc*); *dj*, corresponding voiced affricative, *j* of English *joy*; *s* and *ts*, as in English *sit* and *hats* (in Nahuatl *z* and *tz* are respectively used instead); *š* and *tš*, palatal voiceless sibilant and affricative, acoustically midway between *s-c* and *ts-tc* respectively; *ç* and *tç*, *c* and *tc* pronounced with lower teeth in front of upper; *θ*, interdental voiceless spirant, like *th* in English *thin*.

q, voiceless velar stop like Semitic *qōf*; *qw*, labialized form of same; *x*, voiceless spirant of *q*-position; *x̣*, voiceless spirant of *k*-position, not pronounced as far back as German *ch* of *Bach*; *ḳ* and *g̣* (Kwakiutl), anterior palatal stops (palatalized *k*-stops), approximately *ky* and *gy*; *x̣̣* (Kwakiutl), voiceless spirant of *ḳ*-position, *ch* of German *ich*; *ŋ*, voiced nasal of *ḳ*-position, *ng* of English *sing*; *ŋ̣* (Eskimo), voiced nasal of *q*-position.

ḷ, voiceless lateral spirant; *L*, corresponding voiceless lateral affricative (written *tl* in Nahuatl); *ɭ* (Kwakiutl), corresponding voiced affricative.

ʔ, glottal stop; ː (Nootka), strangulated-sounding laryngeal stop, similar in resonance to Arabic *ʾain*; ʰ (Nootka), strangulated-sounding laryngeal spirant, Arabic *ḥa*; ʰ, aspiration or breath-release of preceding vowel or consonant (*pʰ*, *tʰ*, *kʰ*, and *qʰ* are aspirated voiceless stops); ʔ denotes glottalized stops and affricatives (*pʔ*, *tʔ*, *kʔ*, *qʔ*, *Lʔ*, *tsʔ*, *tçʔ*, *tšʔ*, *tçʔ*, *ḳʔ*), that is, such as are pronounced with simultaneous closure of glottis, but with oral release prior to that of glottal release. All other consonants as in English.

ˈ, stress accent; ː, denotes preceding long consonant (except in Kwakiutl *ḳ*-sounds); ː, denotes nasalization of vowel under which it is placed; +, denotes excessive length of preceding vowel or consonant.

CANADA
DEPARTMENT OF MINES
HON. LOUIS CODERRE, MINISTER; R. W. BROCK, DEPUTY MINISTER.
GEOLOGICAL SURVEY

MEMOIR 63

No. 6, ANTHROPOLOGICAL SERIES

Noun Reduplication in Comox,
a Salish Language of
Vancouver Island

BY

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OTTAWA
GOVERNMENT PRINTING BUREAU
1915

No. 1429

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Noun Reduplication in Comox, a Salish Language of Vancouver Island

INTRODUCTION.

One of the most characteristic grammatical processes of a group of Northwest Pacific Coast languages, embracing the Tsimshian, Kwakiutl-Nootka, Salish, and Chemakum linguistic stocks, is initial reduplication, employed in both noun and verb forms to indicate a variety of grammatical concepts, chiefly those of plurality, distribution, and iteration. The Salish languages in particular are known to make exuberant use of reduplication for grammatical purposes, but the subject, which seems to bristle with irregularities and intricacies of detail, has never been adequately treated for any of the numerous dialects of the stock. Indeed, a thorough grammatical study, at the same time phonetically adequate, of a Salish language, is still one of the desiderata of American linguistics.

During the autumn of 1910, while prosecuting ethnologic and linguistic research for the Geological Survey of Canada among the Nootka Indians now living in two reserves near Alberni, B.C., opportunity was incidentally found to gather some linguistic data on Comox, a Salish language spoken on the east coast of Vancouver island near the present town of Comox. The dialect represented in these notes seems to be

Comox proper (*Q!ōmox̣ʷs*), with which *L!ōhqs*, spoken on the mainland of British Columbia, was stated to be identical. *Sálólṭ*^u was stated to be a northern dialect of the same language. This term is evidently identical with Boas' Čatlóltq, which he uses to apply to the most northern group of Coast Salish tribes, excluding Bella Coola, inhabiting "Discovery Passage, Valdes Island, Bute and Malaspina Inlets."¹ Boas adds, "The Čatlóltq are called K'omoks by the Lékwiltok" (southernmost Kwakiutl tribe.)

The informant was Tommy Bill, an Indian of mixed blood, whose father belongs to the *Ts!icā'aṭ*^a tribe of Nootka Indians, while his mother was a Comox, he himself living with and being to all intents and purposes a member of the *Hōpáṭ!as'aṭ*^a tribe of Nootkas. His knowledge of Comox was obtained in his earlier years, when living among his mother's people, whom he visits from time to time; it is only fair to add that he speaks mainly Nootka and English nowadays and does not claim to have a perfect command of Comox. However, the rather elementary character of the data obtained, together with convincing internal evidence derived from their study, leaves no room for doubt as to the essential accuracy of the material here presented. Most of the time spent on Comox was taken up with securing material pertinent to the problem of reduplication in nouns. For most of the nouns obtained, plural, diminutive, and diminutive plural forms were secured, all of which involve various types of reduplication. Our linguistic material thus naturally divides itself into three heads, not to speak of a small number of nouns that are always used in reduplicated form. A few introductory remarks on Comox phonetics and some supplementary data are also added.

I. PHONETICS.

VOWELS. The short vowels found in the Comox material secured are: *a* (as in German *Mann*); *ā* (as in English *bat*); *e* (short and open as in English *met*); *ɛ* (short and close as in French *été*); *i* (short and open as in English *bit*); *ĩ* (short and close as in French *fini*); *o* (short and open as in German *dort*);

¹ See F. Boas, *First General Report on the Indians of British Columbia*, Report B. A. A. S., 1889, 5th Report on North-Western Tribes of Canada, p. 10.

ø (short and close as in French *beau*); and *u* (short and open as in English *put*). Of these vowels, *e*, *i*, and *ï* are etymologically one sound, which is modified by phonetic surroundings; similarly, *ø* and *u*. Velar consonants tend to lower preceding or following *i* to *e* (possibly sometimes *e*), while certain consonants (particularly *s* and *ʃ*) tend to palatalize *i* to *ï*. *e* and *o*, which latter does not occur often, are doubtless etymologically related to *e* and *ø* respectively, but seem in every case to be clearly kept distinct from these. *ā* is not common.

Corresponding to each of the short vowels is a long vowel (long *ā*, however, has not been found). These are indicated as: *ā* (as in German *Bahn*); *ê* (long and open as in French *mère*, or as in English *bear*, but without "r-vanish"); *ē* (long and close as in German *See*); *î* (long and open as in English *beer*, but without "r-vanish"); *ī* (long and close as in English *see*); *ō* (long and close as in English *roll*, or as in German *Sohn*); *ô* (long and open as in English *born*, but without "r-vanish"); *ū* (long and close as in English *rule*); and *û* (long and open as in English *poor*, but without "r-vanish"). Similarly to the corresponding short vowels, and under parallel phonetic circumstances, *ē*, *î*, and *ī* are variants of one sound, etymologically speaking, though *î* is often to be interpreted as lengthened form of inorganic vowels, in which case it does not seem to vary with *ē* and *ī*; *ō*, *û*, and *ū* are likewise representatives of what is etymologically a single sound. *ô* does not often occur; it is probably etymologically related to *ō*. *ê* occurs often and cannot be considered a mere variant of *ē*.

As not infrequently happens in American Indian languages, the long vowels are not always held out with even stress, but end with short rearticulations which give the whole vowel in each case a quasi-diphthongal effect. Such vowels have been noted by the writer in Takelma, Southern Paiute, and, at least to a moderate extent, in Nootka; Boas has noted them in Tsimshian. While they occur to a considerable extent in Comox, they cannot as in Takelma be considered the normal forms of the long vowels; sometimes the short rearticulations seem to serve as glides to following consonants, particularly velars. The quasi-diphthongal long vowels are here indicated by long vowels followed by superior short vowels, the vocalic

quality of the latter being indicated as in normal short vowels. There are found: \bar{a}^a ; \bar{e}^e ; \bar{e}^i (occurs before anterior palatal consonants); \bar{i}^i ; \bar{i}^e ; \bar{i}^e (occurs before velar consonants); \bar{o}^o and \bar{o}^u ; and \bar{u}^u . A number of cases also occur of short vowels followed by weak rearticulating vowels; such are e^e , ϕ^o , and i^e (here the e is a glide to the following velar consonant). Some of these may well represent secondarily shortened long vowels. Differing from such long or short vowels with quasi-diphthongal character are vowels that are secondarily diphthongized by a vocalic glide whose timbre depends wholly on the following consonant; such is \bar{i}^u in *kúpûmîûx* "hill," in which the second u is a glide due to the u -timbre of the final consonant.

Short vowels of somewhat obscure quality are also found, either representing dulled forms of normal short vowels or being of inorganic origin and meant to lighten consonant clusters or serve as glides. Such vowels are: \bar{A} (as in English *but*, yet sometimes less clearly marked in quality), which is sometimes inorganic, sometimes dulled from a ; \bar{E} (obscure vowel with e -quality); and \bar{I} (very short rather unclear i).

At times short vowels are so weakly articulated as to be barely audible; these are rather "murmured" short vowels of etymological significance than merely glides, timbre-echos of preceding consonants, or voiceless vowels. Examples are: \bar{e} in *lôl'ôbô'm* "small clam" ($-l'ôb-$ reduced from *lô'ôb-* in *lô''ôbom* "clam"; yet in this case \bar{e} can just as well be morphologically dispensed with and phonetically explained as a timbre-echo of $-ôl-$); \bar{A} in *qê'w^Ax* "steel-head salmon" (that \bar{A} is organic, despite its dull quality and extreme brevity, and reduced from a , is indicated by Nootka *qê'waH* "steel-head salmon," with which Comox *qê'w^Ax* is evidently identical; borrowing has doubtless taken place); \bar{A} and \bar{a} in *hêw^Aqen* "swan" and its diminutive *hêw^aqádôl*.

Another class of "murmured" vowels (German 'Murmel-vokale') is formed by weakly articulated, yet not voiceless, vowels occurring in syllabically final position after glottal stops ('). Such vowels are only in part "murmured echoes," i.e., reduced repetitions of immediately preceding fully voiced vowels (such are a'^a , e'^i , i'^i , ai'^i , \bar{o}'^o , \bar{o}'^o ; vowel breakings of this type occur often in American languages); in some cases we have

also murmured vowels after glottal stops that are of different quality and etymologically distinct from immediately preceding vowels (such are a'^i and \bar{a}'^i).

Some consonants, notably glottalized ("fortis") consonants, are apt to be followed by timbre-echoes dependent in quality on the preceding vowel. This simply means that the oral resonance chamber characteristic of a vowel may, failing to be materially disturbed by the following consonant position, linger on and thus become acoustically noticeable as a voiceless (sometimes aspirated) vocalic echo; if the consonant is a spirant, the vocalic timbre may be audible during its production. Examples of such unaspirated timbre-echoes after glottalized consonants are: a in $p! \bar{a}' alats!^a$ "skunk" and e in $k! \acute{o}^\circ d\acute{o}t!^e$ "porpoise." In $l\acute{a}^a g^\circ \acute{e}t!^a$ "herring" the $t!$ was heard with definite a -timbre despite preceding \acute{e} . After u (o)-vowels syllabically final k -sounds are regularly followed by echoes (aspirations when consonant is not glottalized) with u -timbre. Hence k'^u , $k!^u$, x^u , q'^u , $q!^u$, and x^u (see below for orthography of k -sounds). These sounds, however, are also very frequent after unrounded vowels, as in $l\acute{a}^a dak'^u$ "skin;" in such cases they represent original labialized k -sounds (see below). Aspiration with definite u -timbre is also found after t , as in $s\acute{a}l!^u$ "woman."

Excluding such inorganic diphthongs as are formed by vowels and following glides (e.g., i^u), there have been found as true short diphthongs ai , au (also au), $\bar{a}i$, $e\bar{i}$, and long diphthongs $\bar{a}i$, $\bar{a}u$. Vowels normally forming diphthongs that do not so unite, each preserving its full value, are separated by $.$ (thus, $a.i$ as distinct from true diphthong ai). Stress accent is indicated by $'$ over vowels.

CONSONANTS. The consonant system of Comox is fairly full, including, as it does, eleven distinct series that differ according to place of articulation. As regards manner of articulation, six distinct series are to be recognized (voiceless stops, glottalized or "fortis" stops, voiced stops, voiced nasals, voiceless spirants, and voiced spirants), though by no means all of these are represented for all places of articulation. The voiceless stop and glottalized stop series are complete, the voiceless spirants nearly so, while the others are quite defective. All these consonants may be represented in the form of a table:—

	VOICE- LESS STOPS	GLOT- TALIZED STOPS	VOICED STOPS	NASALS	VOICE- LESS SPIRANTS	VOICED SPIRANTS
LARYNGEAL (GLOTTAL).....	'				<i>h</i>	
VELAR.....	<i>q</i>	<i>q'</i>			<i>x</i>	
LABIALIZED VELAR.....	<i>qw</i>	<i>q'w</i>			<i>xw</i>	
GUTTURAL.....	<i>k</i>	<i>k'</i>			<i>ɣ</i>	
LABIALIZED GUTTURAL.....	<i>kʷ</i>	<i>k'w</i>			<i>ɣw</i>	
PRE-GUTTURAL (ANTERIOR PALA- TAL).....	<i>kv</i>	<i>kv'</i>	<i>gʷ</i>		<i>xʷ</i>	<i>y</i>
DORSAL LATERAL.....	<i>l</i>	<i>l'</i>	<i>l</i> (voiced contin- uant) <i>dj</i>		<i>l</i>	
PALATAL SIBILANT.....	<i>tc</i>	<i>tc'</i>			<i>c</i>	
ALVEOLAR SIBILANT.....	<i>ts</i>	<i>ts'</i>			<i>s</i> ¹	
ALVEOLAR.....	<i>t</i>	<i>t'</i>	(<i>d</i>)	<i>n</i>		
LABIAL.....	<i>p</i>	<i>p'</i>	(<i>b</i>)	<i>m</i>		<i>w</i>

c is pronounced like *sh* of English *ship*; *xʷ* like *ch* of German *ich*. *tc*, *tc'*, *dj* (like *j* of English *jam*), *ts*, and *ts'* are affricatives (stop plus corresponding spirant; no simple stops correspond to *tc*-series). *l* and *l'* are also affricatives, but with lateral (voiceless spirant *l*) release.

b and *d* are phonetic variants of *m* and *n*; *b* and *d* were often, though not consistently, heard between vowels, *m* and *n* rather consistently as initials, while *m* and *n* were more often heard as syllabic finals than *b* and *d*. These *b-m* and *d-n* sounds have been at various times analysed by Boas as "semi-nasalized" consonants. "The nasal opening," he writes, "may differ in width, and the stricture of the upper nares may produce semi-nasalized consonants."² Again, in speaking more definitely of Coast Salish, "... the *b* sound . . . is produced with half-closed nose by the Indians of the Strait of Fuca, in the State of Washington. . . . The characteristic trait of the sound is a semiclosure of the nose, similar to the effect produced by a cold in the head."³ These remarks doubtless apply to Comox as

¹ Boas uses *ɕ* (interdental spirant, like *th* of English *thick*) in certain words for our *s*. See his *Catlditq* vocabulary, Report B.A.A.S., 1890, 6th Report on N.W. Tribes, pp. 141-163. I do not know if Tommy Bill's failure to use this sound is an individual peculiarity or not.

² F. Boas, *Introduction*, Handbook of American Indian Languages, Bulletin 40, Bureau of American Ethnology, 1911, p. 22.

³ *ibid.*, p. 17.

well as to more southern Coast Salish languages, yet it seems likely to the writer that under certain phonetic conditions these semi-nasals become true nasals. No attempt will here be made to normalize orthography on this point, a faithful record of what was heard, or thought to be heard, being presented.

Eliminating *b* and *d* as of secondary origin (*gʷ* and *dʒ*, it should be carefully noted, are true sonant stops, not "intermediates"), all the other consonants listed in the table are etymologically distinct, that is, none of them are mere variants. (*k*, *kʼ*, and *x*, however, may prove to be merely secondary forms of *kw*, *kʼw*, and *xw*.) This gives us no less than thirty-six (or thirty-three) organically distinct consonants to operate with. A secondary series of aspirated surds (voiceless stops followed by aspiration) arises when voiceless stops occur as syllabic finals (written *pʼ*, *tʼ*, *kʼ*, *kʷʼ*, *qʼ*, *tcʼ*); *kw* and *qw* become *kʷʰ* and *qʷʰ*, that is, their aspiration-release has *u*-timbre; similarly, *kʼw* and *qʼw* in this position become *kʷʰʰ* and *qʷʰʰ*. *q*, it may be noted, is often released into a weak spirant glide *x* (written *ʷ*) before the following vowel is attacked (thus, *qʷa* for *qa*). Final vowels and *m* and *n* are also often followed by aspiration (*-aʰ* and similarly for other vowels, *mʰ* or less often *bʰ*, *nʰ* or less often *dʰ*), though this was not consistently heard. Final *m* and *n* are etymologically distinct from final glottally affected *m* and *n*, which are written *mʰ* and *nʰ* (sometimes breath release is heard after glottal release, when they are written *mʰʰ* and *nʰʰ*). Long consonants (indicated by *ː* after consonant) were noted, but seem to be of no etymological significance (examples are *qː*, *dː*).

SOUND CHANGES. Lengthening and reduction of vowels are important phonological processes in Comox, also, though to less extent, changes of vowel quality. As these, however, are generally of grammatical significance, they are best taken up in their proper place under types of reduplication. As more strictly phonetic pure and simple in character is to be considered the palatalizing of *a* to *i* in the neighbourhood of *gʷ*, also the change of *A* to *u* and *i* in appropriate phonetic circumstances. These changes also, however, are most clearly brought out in connexion with morphological processes.

Many cases of *gʷ*, perhaps all, are undoubtedly due to original *w*. It seems that *w*, when it came to stand between vowels

(not, it would seem, including cases of preceding vowel plus glottal stop), also initially in many cases, regularly passed into g^v . Thus, as diminutive of $x\acute{a}uc\acute{in}'$ "bone" is found $x\acute{e}xig^v\acute{ic}\acute{in}'$ < $*x\acute{e}xawic\acute{in}'$ (- ag^v - becomes - ig^v -, as noted above). Similarly, from $q\acute{e}'w^Ax$ "steel-head salmon" is formed $q\acute{e}'qeg^ve'x$ "little steel-head salmon" and $q\acute{e}qauq\acute{a}'ag^v\acute{e}'x$ "little steel-head salmon (plur.)." This phonetic law explains a class of plurals, formed by reduplicating with φ - vowel, derived from stems in internal - g^v -. Thus, from $t\acute{e}g^vem$ (< $*t\acute{e}wem$) "sun, moon" is formed plur. $t\acute{e}ut\acute{e}g^vem$ (< $*t\acute{e}w\acute{t}ewem$); other examples will be given in their proper place. So also is explained suffix - $\acute{a}g^v\acute{il}$ "canoe" in such forms as $tc\acute{a}d\acute{a}^ag^v\acute{il}$ "three canoes," $s\acute{e}yats\acute{a}^ag^v\acute{il}$ "five canoes", as compared with - $\acute{a}ul$ in $m\acute{o}s\acute{a}ul$ "four canoes;" - $\acute{a}g^v\acute{il}$ is evidently from $*\acute{a}w\acute{il}$ (cf. Kw\acute{a}ntl\acute{e}n, of Cowichan group of Coast Salish, - $aq\acute{il}$ "canoe" in numerals,¹ i.e., - $axw\acute{il}$; perhaps cf. Comox $n\acute{e}xw\acute{il}$ "canoe"). An interesting test case is $q\acute{e}'g^vas$ "deer," doubtless a loanword from Kwakiutl (cf. Kwakiutl $q\acute{e}w\acute{as}$ "deer"²). Another such test case is afforded by Comox $t\acute{ig}^v\acute{i}^ux^u$ "nine" < $*t\acute{a}w\acute{a}x^u$ or $*t\acute{a}wux^u$ (cf. Kw\acute{a}ntl\acute{e}n $t\acute{u}q$ "nine,"³ i.e., $t\acute{u}x$ or $t\acute{u}x$, contracted from $*twuux$). Compare also Comox $h\acute{e}'g^v\acute{o}s$ "chief" with Pentlatch and Siciatl $h\acute{e}w\acute{us}$ ⁴. On the other hand a number of words have been found with w between vowels. Such are $ts\acute{a}ts\acute{a}w\acute{ic}\acute{in}'$ "hail," $xw\acute{a}'aw\acute{i}'t$ "fire," and $\acute{a}w\acute{a}k^u$ "tobacco." It is not clear how this - w - is related to - w - > - g^v -.

Just as g^v and w are related, so there is reason to believe that dj and y are related, though there is perhaps not quite as convincing internal evidence at hand. See Type VIII of plural formations for such evidence. Moreover, with Comox $dj\acute{id}is$ "tooth" compare Kw\acute{a}ntl\acute{e}n $y\acute{e}nis$ "tooth,"⁵ with Comox $dj\acute{ic}\acute{in}'$ "foot" compare Siciatl $y\acute{ic}\acute{in}$.⁶

¹ See C. Hill-Tout, *Ethnological Studies of the Mainland Halk\acute{o}ml\acute{e}m, a division of the Salish of British Columbia*, Report of British Association for the Advancement of Science, 1902, Ethnological Survey of Canada, p. 65.

² See F. Boas, *Kwakiutl*, Handbook of American Indian Languages, Bulletin 40, Bureau of American Ethnology, 1911, p. 447.

³ C. Hill-Tout, *ibid.*, p. 64.

⁴ F. Boas, *Comparative Vocabulary of Eighteen Languages spoken in British Columbia*, Report of British Association for the Advancement of Science, 1890, 6th Report on the North-western Tribes of Canada, p. 148.

⁵ C. Hill-Tout, *Ethnological Studies of the Mainland Halk\acute{o}ml\acute{e}m, a division of the Salish of British Columbia*, Report of British Association for the Advancement of Science, 1902, Ethnological Survey of Canada, p. 86.

⁶ F. Boas, *Comparative Vocabulary of Eighteen Languages spoken in British Columbia*, Report of British Association for the Advancement of Science, 1890, 6th Report on the North-western Tribes of Canada, p. 147.

II. NOUNS NORMALLY REDUPLICATED.

A considerable number of Comox nouns always appear in reduplicated form, reduplication in these cases being of no grammatical significance, but belonging to the noun as such. Many of them are animal names, and of these some are quite evidently onomatopoeic. Ten fairly distinct types of reduplication seem to be illustrated in the rather limited material available. Very likely others exist.

Type I. Completely Reduplicating.

<i>hō'mhō'm</i> blue grouse	<i>xōp'xōp'</i> humming-bird
<i>kʷăckʷăc</i> bluejay	<i>ts!î'xʷts!îxʷ</i> fish-hawk
<i>pôkʷpôkʷ</i> liver	<i>gʷî'gʷî</i> panther
<i>qê'n'qen'</i> duck	<i>qwî'qwî</i> sea-gull

"Duck" and "sea-gull" have both syllables with vowels alike in quality but with short vowel in the second.

Type II. Completely Reduplicating with ê.

tê'tlôl' small butter-ball duck *hă'îhei'* arrow
 "Arrow" belongs perhaps rather with Type I. Both of these nouns lose a glottal stop in the reduplicating syllable.

*Type III. Reduplicating Syllable: cvc₁.*¹

<i>tîctîctî'c</i> owl	<i>kwa'kwă'djô'</i> grey squirrel
<i>t!Ăq't!Ăqăi</i> dog-wood	

Type IV. Reduplicating Syllable: cē.

<i>mî'ēmau</i> cat	<i>kʷ!ê'kʷ!ăkʷ!</i> crow
<i>tcî'itca.iq'</i> salt-water hunter	

In "salt-water hunter" reduplicating *tcî-* is broken into *tcî'i-*.

¹ In these formulæ c represents first consonant of stem, v first vowel, c₁ second consonant of stem, v₁ second vowel, and so on. ̂ represents any long vowel, ̃ any shortened vowel.

Type V. Reduplicating Syllable: ci.

Only one or two certain examples have been found of this type. They differ from the preceding in that the vowel of the reduplicating syllable is short.

qwi'qwā't!Alā'k' butterfly *wé'wāloš* young man
(form probably diminutive in).

Possibly also:—

é'ādjām' young woman

Type VI. Reduplicating Syllable: cā or ca.

LāLāpx pocket-knife *qwāqum'i's* marten
xāxē'i nit *māmstcō'm* mink

Type VII. Reduplicating Syllable: cv.

ts!ats!āwicin' hail *tc!atc!ā't!ān''* mouse
xwāxwadjō'm fly (word probably diminutive in form).
qāq'tā'amas game with wooden ball¹
qóqow'i'm' down (of bird)

Type VIII. Reduplicating Syllable: cṽ'.

qā'aqa' rush mat *djā'a'dja'* tree

Type IX. Reduplicating Syllable: cō.

Only one example has been found of this type:—
tōt'x'lał necklace

Type X. Reduplicating Syllable: cēc.

Of this very peculiar type (doubly reduplicating consonant, otherwise like Type IV) also only one example has been found:—
q!îq!q!ā'adjē'uk'' butter-ball duck

¹ Formed from *q'tā'abas* "wooden ball covered with spruce-roots." There were two sides in the game, with the same number on each. Each side had a goal consisting of a little pit, which was guarded by one man. All but the two guards gathered in the centre. One man threw up the wooden ball and everyone tried to catch it, run with it to the goal of the opponents, and put it into the pit. Those of the other side tried to take the ball away from the one that had it. The side that first made ten goals won the game. After four goals had been made, the game was suspended for a while and a general free-for-all fight took place.

Here may also be given:—

q!áq!tuṣ^u big fire (form is augmentative?): cf. *q!ǎtiṣ^u* fires scattered around.

III. REDUPLICATED PLURALS OF NOUNS.

By far the larger number of Comox nouns form their plural by reduplication, in a few cases different stems are used for singular and plural, while still other nouns seem to form no plural. The most persistent type of plural reduplication is that in which both first and second consonants of stem are repeated, though less numerous represented types also occur.

Type I. Reduplicating Syllable: cvc₁

<i>!Ákəm^u</i> beaver	plural <i>!Ák^u!Ákəm^u</i>
<i>kúmāqin^u</i> sea-lion	<i>kumkúmāqin^u</i>
<i>qwādīⁱ</i> humpbacked whale	<i>qwād qwādīⁱ</i>
<i>qwásam</i> woolly grouse	<i>qwásqwásam</i>
<i>xōp^uxōp^u</i> humming-bird	<i>xōp^uxōp^uxōp^u</i>
<i>ts!oxó^o</i> codfish	<i>ts!óxts!oxó^o</i>
<i>L!Áxwāⁱ</i> dog salmon	<i>L!ÁXL!Áxwāⁱ</i>
<i>sá'an^u</i> coho salmon	<i>sá^usa'an^u</i>
<i>q!wát'í'tcin^u</i> humpback salmon	<i>q!wát'q!wát'í'tcin^u</i>
<i>xá'ā</i> big clam	<i>xá^uxa'ā</i>
<i>Lī^uAm^u</i> cockle	<i>Lī^uLī^uAm^u</i> (type viii?)
<i>xápāⁱ</i> red cedar	<i>xáp^uxápāⁱ</i>
<i>qō^uaⁱ</i> hemlock	<i>qō^uqō^uaⁱ</i>
<i>q!áp!xwai</i> oak	<i>q!áp!q!áp!exwai</i> (with lengthening of first stem-vowel; -e- is in- organic)
<i>p!ē'ixāi</i> alder	<i>p!ēⁱp!ē'ixāi</i> (type viii?)
<i>t!ē'ibāi</i> wild cherry bush	<i>t!ēⁱt!ē'ibāi</i> (type viii?)
<i>'áwāk^u</i> tobacco	<i>'au'áwāk^u</i> many bun- ches of tobacco
<i>q!wá'ix</i> wood	<i>q!wáiq!wá'ix</i>
<i>xá'a.idatc</i> stump	<i>xá^uxa'a.idatc</i>

<i>mAqsín</i> nose	plural <i>mAqImAqsín</i>
<i>djícín</i> foot	<i>djíc djícín</i>
<i>djídís</i> tooth	<i>djíd djídís</i>
<i>L!íkuínAs</i> heart	<i>L!Ék' L!íkuínAs</i>
<i>xÁucín</i> bone	<i>xÁuxÁucín</i>
<i>kʷít!</i> little finger	<i>kʷít!kʷít!</i>
<i>ts!Ámāla</i> index finger	<i>ts!Ámts!Amāla</i>
<i>q!wát!Am</i> river	<i>q!wát'q!wát!Am</i>
<i>páxaí</i> creek	<i>páxpaxai</i>
<i>L!áqē^enac</i> spring	<i>L!áq' L!aqē^enac</i>
<i>kúpú^umî^ux^u</i> hill	<i>kup'kúpumî^ux^u</i> (with shortening of second stem-vowel)
<i>L!áxaí</i> old man	<i>L!áxL!axai</i>
<i>qÁl'q!</i> warrior	<i>qÁl'qÁlq!</i>
<i>L!Ams</i> house	<i>L!ÁmL!Ams</i>
<i>xÁsAm</i> box	<i>xÁsAxAsAm</i>
<i>kwá'am</i> coiled storage basket	<i>kwá'akwa'am</i>
<i>L!pātīl</i> basket bag	<i>L!Ap' L!Apātīl</i>
<i>q!ák^u</i> board	<i>q!ák^uq!ák^u</i>
<i>kʷ!ík^uāyu</i> oar	<i>kʷ!ík^ukʷ!ík^uāyu</i>
<i>sAQ'Ák^u</i> war-club	<i>sAQ'sAQ'Ák^u</i>
<i>lAQ!^u</i> bow	<i>lAQ!^ulAQ!^u</i>
<i>tc!ít'qāmin</i> knife	<i>tc!ít'tc!ít'qāmin</i>
<i>síp!Amîⁿ</i> shinny stick	<i>síp!stp!Amîⁿ</i>
<i>lAQ!As</i> mountain-goat blanket	<i>lAQ!lAQ!As</i>
<i>L!pî'ts!ā^a</i> yellow-cedar	<i>L!Ap' L!Apî'ts!ā^a</i>
<i>q!Ás'Adāi</i> buckskin shirt	<i>q!Asq!Ás'adāi</i>
<i>L!áq!acin^u</i> moccasin	<i>L!AQ!L!AQ!acin^u</i>
<i>páq'āqs</i> white-eyed	<i>páq'paq'āqs</i>
<i>tcíxāqs</i> red-eyed	<i>tcíxtcixāqs</i>

Type II. Reduplicating Syllable: cac.

This type differs from the preceding in that, while both first and second stem-consonants are reduplicated, the stem vowel between these consonants is not, but is replaced by an inorganic *a*-vowel. If the vowel is followed or broken by a glottal stop, or if there are two successive vowels, the second consonant is

repeated just the same, the glottal stop being neglected in the reduplicating syllable. Thus, *tc!e'ād-* and *L!ā'al-* reduplicate as *tc!in-* and *L!Al-* respectively. Several nouns with stem-*A* and reduplicating-*A*, listed under Type I, should perhaps belong here. Three sub-types are to be recognized, according to whether *A* remains as such (sub-type *a*), is palatalized by *s*, *tc*, *tc!*, *kʷ*, *l*, or *y* to *i* (*I*) (sub-type *b*), or is labialized by *xw* to *u* (sub-type *c*).

Sub-type II a.

m!ə'xāl bear
L!ā'al'ō'm' wolf
q!ā^aL! land otter
q!ā^asa' sea otter
xā^awa fur seal
āsx^u hair seal
k!ō^adōt!^a porpoise

p!āq!Adāt^c goose
qē'n'qen' duck
hēw^Aqen' swan
qē'w^Ax steel-head salmon
tā^aq!wa' devil-fish
māt!āi horse clam

sā^a'ba' mussel
mā^atc!in' louse
ōsā'i huckleberry bush
xwāsAbāi soapberry bush
t!ē'e' dē^aqwai salmon-berry bush
t!ā'abuxwāi gooseberry bush

qēx^u ring finger
L!ā^aq!wāi fish-gill
sōpAdat^c tail
ts!āmugl cloud

plural *m!əxmi^axāl*
L!ā!L!ā'al'ō'm'
q!AL!q!ā^aL!
q!ās^aq!ā^asa'
xāuxā'wa
'ās'āsx^u
k!wAd'k!wō^adōt!^a (with
 shortening of second
 vowel of stem)
p!āq!p!āq!Adāt^c
qā^ad'qēn'qen'
hāuhew^Aqen'
qAuqē'w^Ax
tAq!tā^aq!wa'
mAt!mā^at!āi (with length-
 ening of first vowel
 of stem)
sAmSā^a'ba'
mAtc!Imā^atc!in'
'As'ōsā'i
xwāsxwāsAbāi
t!Ant!ē'e' dē^aqwai
t!Am!āmuxwāi (with re-
 duction of *ā'a* of stem
 to *A*)
qāx^uqēx^u
L!āq!^uL!ā^aq!wāi
sāp'sō^upAdat^c
ts!āmrits!āmugl

<i>t!ā'q!at'</i> mountain	plural <i>t!Aq!t!ā'q!at'</i>
<i>sē'qet'</i> dug hole, well	<i>sÁq' sē'qet'</i>
<i>tō'mic</i> man	<i>tÁmtō'mic</i>
<i>xā'p!</i> baby basket	<i>xAp!xā'p!</i>
<i>t!ō'mt'</i> paddle	<i>t!Amt!ō'mt'</i>
<i>waxā'ts!i</i> pipe	<i>wÁxwaxā'ts!i</i>
<i>tót'x'ulal</i> necklace	<i>tÁt'ōt'x'ulal</i>
<i>q'tā'abas</i> wooden ball used in game	<i>qÁt'q'tā'abas</i>
<i>mítāli</i> beaver-tooth die	<i>mÁt'mítāli</i> (with lengthening of first stem vowel)
<i>qā'aqa</i> rush mat	<i>qAq'qā'aqa''</i>
<i>lāq!wāinop</i> cedar-bark mat	<i>lÁq!lāq!wāinop'</i>
<i>L!āxex</i> oldest	<i>L!AxL!āxex</i>
<i>L!álsāmi</i> strong	<i>L!ÁL!álsāmi</i>
An irregular example of this sub-type is:—	
<i>sáts!Am</i> tyee salmon	<i>sÁmsÁ'ts!Am</i>

Here the first and third, instead of first and second, consonants are reduplicated.

Sub-type II b.

<i>tc!é'ādo</i> dog	<i>tc!tntc!é'ādo</i>
<i>k'áck'ác</i> bluejay	<i>k'íck'áck'ác</i>
<i>lō''bom'</i> small clam	<i>lrm!lō''bom'</i>
<i>ts!átc!ilbai</i> spruce	<i>ts!itc'ts!átc!ilbai</i> (<i>ts!itc'</i> instead of <i>ts!itc!-</i>)
<i>sōsîn'</i> mouth	<i>síssōsîn'</i> (with shortening of second stem-vowel)
<i>sápāxos</i> horn	<i>sípsápāxos</i>
<i>kō''sAd'</i> star	<i>kwískōsAd'</i>
<i>yāxai''i</i> pack-basket	<i>yíxyāxai''i</i>

Irregular examples of this sub-type are:—

<i>tc!atc!ā't!ān''</i> mouse	<i>tc!ít'tc!ā't!ān''</i> (for <i>tc!it'</i> instead of <i>tc!it!</i> -see "spruce" above)
<i>it'x'sal</i> tongue	<i>tíst'x'sal</i>

In the first of these the plural is built not on the already reduplicated simplex (as e.g., in "bluejay" above), but on a simpler unreduplicated stem abstracted from it. In the second example the first and third, instead of the first and second consonants, are reduplicated (cf. "tyee salmon" above).

Sub-type II c. Only one example is available:—

xwātoqo'm "falls" plural *xūt'xwātōqo'm*

Type III. Reduplicating Syllable: cō or cō.

Nearly all of these nouns have *g^v* as their second consonant, representing, as we have already seen, original *w*. These nouns could be considered a sub-type of Type II, were it not that they form their reduplicating syllable not in *-Au*, as might perhaps be expected (cf. *xāuxaucin'* under Type I), but in *-ō-* (*-ū-* after *dj-* and *g^v-*) or *-q-* (probably due to contraction of original *-Aw-*). Two sub-types can be recognized, according to whether the reduplicating vowel is short (sub-type *a*) or long (sub-type *b*).

Sub-type III a.

<i>tā'ag^vax^u</i> fern	<i>toṭā'ag^vax^u</i>
<i>tā'ag^vin</i> salmon spear	<i>toṭā'ag^vin</i>

Sub-type III b.

<i>lā'ag^vēt!^a</i> herring	<i>lōlā'ag^vēt!^a</i>
<i>p!ēg^vāi</i> halibut	<i>p!ō^up!ēg^vāi</i>
<i>g^vī'g^vī</i> panther	<i>*g^vūg^vī'g^vī</i> (not obtained as such, but implied in diminutive plural <i>g^vī'g^vūg^vī'g^vī</i> "pan- ther cubs")
<i>l!ēg^vem</i> sun, moon	<i>l!ō^ul!ēg^vem</i> sun and moon
<i>hēg^vos</i> chief	<i>hō^uhē'g^vos</i>
<i>djīg^vin'</i> song	<i>djūdjtīg^vin'</i>
<i>lā'dak^u</i> skin	<i>lō^ulā'dak^u</i>

It is not clear why "skin" should reduplicate with *ō*-vowel.

Type IV. Reduplicating Syllable: cv; Syncope of First Stem Vowel.

Only one example has been found of this type. As it begins with *g^v*-, the stem -*g^v* of the plural, coming immediately before another consonant, reverts to *w*, uniting with preceding *a* to form *au*.

g^váq'āhas married woman plural *g^váuq'āhas*

That **wáq'āhas* is to be presupposed is corroborated by comparison with Kwántlən *s-wä-wékus* "married woman."¹

Type V. Reduplicating Syllable: ečc.

Nouns belonging to this group have long stem-vowels and differ from Type I in that the reduplicated vowel is shortened, though it keeps its quality.

<i>xāug^vas</i> grizzly bear	<i>xáu xāug^vas</i>
<i>qá'um[˘]</i> eye	<i>qáu qā'um[˘]</i>
<i>qō[˘]'mai[˘]</i> snow on ground	<i>qúm qō[˘]'mai[˘]</i>
<i>lōkō[˘]mīn</i> bailer	<i>lūk[˘] lōkō[˘]mīn</i>

Type VI. Reduplicating Syllable: cac₁.

<i>tī'hā^adān'</i> chief's wife	<i>tāhtīhā^adān'</i>
<i>hēq'sā^amīn[˘]</i> pole for poling canoe	<i>hāq'hēq'sā^amīn[˘]</i>
<i>ōlqai'ⁱ</i> snake	<i>'ál'olqai'ⁱ</i> (with shortening of first stem-vowel)
<i>aL</i> leggings	<i>'ál'aL</i>

"Leggings" may, of course, just as well belong to Type I.

Type VII. Reduplicating Syllable: cv.

<i>q!óa'āda</i> ear	<i>q!óq!óa'āda</i>
<i>tī (L!Ams)</i> big (house)	<i>tītī (L!Ams)</i> big (houses)
<i>āx^u</i> snow-flake	<i>ā'āx^u</i> falling snow

¹ C. Hill-Tout, *Ethnological Studies of the Mainland Halkōmēlem, a division of the Salish of British Columbia*, Report of British Association for the Advancement of Science, 1902, Ethnological Survey of Canada, p. 89.

Type VIII. Reduplicating Syllable: *cē*.

According to varying phonetic circumstances we have either *i* or *ē*, the latter occurring after *q*, *q'* and *x*. The examples of this type obtained are:—

<i>q!āik^u</i> eagle	plural <i>q!ēⁱq!āik^u</i>
<i>kwūdjak^u</i> trout	<i>kwīⁱkwūdjak^u</i>
<i>tīⁱx^u</i> yellow cedar	<i>tītīⁱxwai^u</i> (may belong also to type VII; note -ai ^u in plural)
<i>djā^a°dja^a</i> tree	<i>*djīdjā^a°dja^a</i> (not ob- tained as such, but implied by diminutive plural <i>djēdjīdjā^a- °dja^a</i>)
<i>sāⁱidj^a</i> leaf	<i>sīsāⁱidj^a</i>
<i>tcāyac</i> hand	<i>tcītcāyac</i>
<i>sayā^aada</i> neck	<i>sīsayā^aada</i>
<i>qā^aya^a</i> water	<i>qēqā^aya^a</i>
<i>sā^ayał</i> lake	<i>sīsā^ayał</i>
<i>xā^aadjaic</i> stone	<i>xēxā^aadjaic</i>
<i>tcūⁱ</i> child	<i>tcītcūⁱ</i>
<i>k!ōyōkōbīⁿ</i> (or -mī ⁱ d) fisherman	<i>k!wīk!ōyōkōmīⁿ</i>
<i>sidjāqō^p</i> basket hat	<i>sīsīdjāqō^p</i>
<i>tāidatctān</i> woman's cedar-bark skirt	<i>tītāidatctān</i>

Eliminating "yellow cedar," which, as was pointed out, may just as well be reckoned as belonging to Type VII (there is reason, however, to believe that *tīⁱx^u* goes back to **tīyīx^u*; see diminutive type I b and diminutive plural type II f), all these plurals may be plausibly explained as cases of Type II, reduplicating -*i*- or -*ē*- being the contracted result of -*ay*-. It will be observed that the stems of these nouns contain either *i*- diphthongs, including broken groups (-*āi*-, -*a'ī*-, -*ū'i*-), vowel plus *y* (-*āy*-, -*ay*-, -*ā'y*-, -*ōy*-), or vowel plus *dj* (-*udj*-, -*ā'°dj*-, -*ā'adj*-, -*idj*-); *dj*, as we saw above, is probably a resultant of original *y*.

Type IX. Reduplicating Syllable: cā (or ca).

Sub-type IX a (with ā).

<i>tc!ēl</i> rain	plural <i>tc!ātc!ēl</i>
<i>qō'uqwai</i> speaker	<i>qwāqō'uqwai</i>
<i>yīp'i'x'u</i> hole	<i>yāyīp'i'x'u</i>

Sub-type IX b (with a).

<i>tcī'itca.iq'</i> salt-water hunter	<i>tcātctī'itca.iq'</i>
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Type X. First Stem-vowel Changed to ē.

These nouns are reduplicated to begin with, and substitute for plural reduplication a change of the first stem-vowel to *ē* (long and open).

The few examples are:—

<i>wē'wālōs</i> young man	<i>wē''wālōs</i>
<i>ē'ādjam'</i> young woman	<i>ē''ādjam'</i>
<i>k'v!ē'k'v!āk'v!</i> crow	<i>k'v!ē'ē'k'v!āk'v!</i>

Type XI. Reduplicating Syllables: cācāc.

Only two examples have been found of this doubly reduplicating type of plural formation. In the first, the *A*, coming after *g'v*, is palatalized to *i*; in the second, the reduplicating *-Ay-* becomes *-i-* (see Type VIII).

<i>g'vā'di'm</i> slave	<i>g'vāg'v'idg'vā'di'm</i>
<i>tāyac</i> killer-whale	<i>tātītāyac</i>

Irregular Plurals.

Several plurals listed above are somewhat irregular, but there has been no difficulty in assigning them to definite types. The two that follow are quite irregular. The second shows not only reduplication but breaking of *-A-* to *ā'a-*.

<i>djā'a'dja'</i> tree	<i>djādājīā'm</i>
<i>māl'q'u</i> fawn	<i>mamā'aliq'u</i>

A few nouns change the stem entirely in passing from singular to plural. Such are:—

<i>sált'ʷ</i> woman	plural <i>nigʷáp'tai</i>
<i>sá'asht'ʷ</i> girl (diminutive of <i>sált'ʷ</i>)	<i>nínigʷap'tai</i> (diminutive of <i>nigʷáp'tai</i>)

Involving this same change of stem is:—

<i>sáltuxʷ</i> married man	<i>nigʷáp'tahai'</i>
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Rather different, presumably, is:—

<i>tátr'nātcap'</i> leg	<i>tcúk!u'nātcap'</i>
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which keeps the same suffix in the plural, while changing the stem.

Nouns without Plurals.

Quite a number of nouns were secured which form no plural. Some of these are reduplicated to begin with, and there is clearly a feeling, though one by no means consistently applied, against re-reduplication in forming plurals. Others, however, are such as might easily be reduplicated, were it usage to do so. It is possible that reduplicated plurals might have been given for some of these by other informants. Reduplicated nouns that form no plural are:—

<i>gʷí'gʷí'</i> panther	<i>qwáqumî's</i> marten
<i>títctítcī'c</i> owl	<i>mámstcō'm</i> mink
<i>ts!í'xʷts!í'xʷ</i> fish-hawk	<i>qwi'qwi'</i> sea-gull
<i>qwi'qwá't!Alā'a'k'</i> butterfly	<i>xwáxwadjō'm'</i> fly

(probably diminutive; dim. plur.

is found)

<i>pók'ʷpók'ʷ</i> liver	<i>xáxé'i</i> nit
<i>Lálāpʷ</i> knife	<i>háiihei'</i> arrow

Non-reduplicated nouns for which my informant would give no plurals are:—

<i>māyos</i> raccoon	<i>pī'k!</i> ground-hog
<i>q!é'etc</i> elk	<i>p!á'alats!ª</i> skunk
<i>p!óxō'ª</i> } raven	<i>'āmáx'ídjō'ª</i> ant
<i>p!ah</i> }	<i>qéix</i> salmon-egg
<i>tc!eqʷ</i> robin	<i>mō'os</i> head

For “robin,” *tc!Ag'tc!eq'*, which might well enough be expected as plural, was explicitly denied. If necessary to express plurality in these nouns, *qax* or *qax* “many” can be juxtaposed before any of them.

IV. REDUPLICATED DIMINUTIVES OF NOUNS.

Diminutives in Comox, as in other Salish languages, are formed by means of reduplication. Reduplicated diminutive forms, however, differ from reduplicated plurals in that the reduplicating syllable repeats the first consonant of the stem, never also the second. Moreover, the vowel of the reduplicating syllable is formed according to different rules from that of the reduplicating syllable of plural forms. Further complications result from the internal changes to which the stem is often subjected, so that altogether a large number of more or less distinct types of diminutive formations may be recognized. It will be advantageous to list in a purely analytical way the various features that are found in diminutives, so that ready reference may be made to them when discussing the types as such.

Diminutivizing characteristics are:—

- (1.) *Reduplication* of initial consonant of stem, followed by
 - a. *Short e* (*i* or *ɨ*). Two types of *e*-reduplication may be recognized, according to whether *e* is or is not accented. Thus, *mímə'qs* from *mə'qs* "head"; *qeqə'ya* from *qə'ya* "water."
 - b. *Long ē* (*î* or *ī*), always accented. Thus *L!îL!Axwā'* from *L!Axwā'* "dog-salmon."
 - c. *ê*, always accented. Thus *q!ê'eq!ēL!* from *q!āL!* "land-otter."
 - d. *ÿ*, which may or may not be accented. Thus, *lôlkə'mîn* from *lôkə'mîn* "bailer."
 - e. *ṽ*, which is regularly accented. Thus, *k!ôk!qđôt!ṽ* from *k!ôđôt!ṽ* "porpoise."
 - f. *Short a*, accented or not. Thus, *LáLṽ'îm'* from *Lṽ'îm'* "cockle."
 - g. *Long ā*. Thus, *djādjdā'gṽîn'* from *djîgṽîn'* "song."
 - h. *Long ā'a*. Thus, *sā'aslt'u* from *sālt'u* "woman."
 - i. *Short ə*. Thus, *L!əL!ā'amî's* from *L!ams* "house."
- (2.) *Glottal stop inserted in stem*. This may occur as
 - a. Breaking of (non-final) vowel or diphthong. Thus, *tçitcā'yac* from *tçāyac* "hand."
 - b. Glottalizing of final consonant (generally *m* or *n*); this should probably include breaking of vowel when final. Thus, *lôṭṭəq'm'* from *lô'ṽbqm'* "small clam."

- (3.) *Quantitative vocalic changes* (increments). These include
- Lengthening of (last) stem vowel.* Thus, *tâtig'āx* from *tā'aq'ax* "fern."
 - Change to wā or wa of u of stem.* Thus, diminutive plural *kwīkumkwā'māqīn'* from plural *kumkūmqīn'* "sea-lions."
 - Lengthening of inorganic A (or i, e) to ī.* Thus, *xēxsim'* from *xāsam* "box." Less often, full *a* is changed to *ī* (cf. 4b), as in *kwēkwī'im'* from *kwā'am* "coiled storage basket."
 - Insertion of ī.* This is probably but another form of 3c, inorganic *A* and absence of vowel being perhaps considered as phonologically equivalent. Thus, *qēqālī'q!* from *qāl'q!* "warrior."
 - Insertion of short vowel (A, i) before syllable with lengthened vowel.* Thus, *xē'xig'icīn'* (note second *i*) from *xāucin'* "bone."
 - Lengthening of A or a (non-final) to ā.* Thus, *q!wāq!wā'a-djix* from *q!wā'ix* "wood."
- (4.) *Qualitative vocalic changes.* These include
- Umlaut of a to short ē (i).* Thus, *xēxā'adjē'ic* from *xā'adjāic* "stone."
 - Umlaut of a (or ā), rarely o, to long ē (ī, ī).* Thus, *q!ē'q!ē'k'u* from *q!ak'u* "board."
 - Change of stem vowel to ā'a.* Thus, *tōtā'amic* from *tō'mic* "man."
- (5.) *Vocalic reduction.* Under this head may be grouped
- Shortening of stem vowel before syllable with lengthened vowel (or inserted ī).* This shortening before lengthening is doubtless due to quantitative rhythm. Thus, *qwī'qwī'ī* (note second *i*) from *qwī'ī'qwī'* "sea-gull. Such shortened syllables regularly lose their glottal stop, if there is one present, as in *qēqawēm*" from *qā'um* "eye."
 - Syncope of stem vowel after reduplicating syllable with accented vowel.* Long vowels may thus fall out quite as readily as short ones. Thus, *sē'sp'xos* from *sāpāxos* "horn."

These twenty-two diminutivizing features occur in various combinations, so that a large number of possible types of
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diminutive formation may result. A considerable number of such types can be constructed from the available material, but this need not exemplify all that actually occur. As to which of the features listed are fundamental to Salish and which merely secondary in Comox or several Coast Salish languages, it is useless to speculate. Adequate comparative data are necessary. A few points of a comparative nature will be brought forward at the end of the paper. The various diminutive types will now be taken up in order, the main stress being laid on the form of the reduplicating syllable.

Type I. Reduplicating Syllable: cé.

Various sub-types occur, according to whether the stem vowels remain unmodified or are subjected to comparatively slight changes.

Sub-type I a. Diminutive feature 1a only:—

<i>mó'os</i> head	diminutive <i>mámó'os</i>
<i>q'tā'abas</i> wooden ball	<i>qéq'tā'abas</i>
<i>q!ə'a'āda</i> ear	<i>q!wéq!əa'āda</i>
<i>'áwāk^u</i> tobacco	<i>'é'awāk^u</i>
<i>qwáđi's</i> whale	<i>qwéqwáđi's</i>
<i>qōw'a'i</i> hemlock	<i>qwiqōw'a'i</i>
<i>sidjāqō'p'</i> basket cap	<i>sísidjāqō'p'</i>
<i>qéix</i> salmon-egg	<i>qéqéyix</i> (-eyi- probably merely variant of -ei-)

Sub-type I b. Diminutive features 1a, 3c (or d):—

<i>máqsrn'</i> nose	<i>mímáqsrn'</i>
<i>djidis</i> tooth	<i>djidjidis</i>
<i>tīⁱx^u</i> yellow cedar (< *tīyix ^u)	<i>tītīyix^u</i>
<i>qál'q!</i> warrior	<i>qéqál'q!</i>

Sub-type I c. Diminutive features 1a, 3a, 5a:—

<i>hēg^uos</i> chief	<i>héhēg^uō^s</i>
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Type II. Reduplicating Syllable: cê; stem: feature 2a.

In these diminutives the first vowel of the stem is broken, the broken vowel taking the form *ǝ'ǝ*. If the final vowel is long, it seems to be shortened (*-ā* becomes *-^a*).

<i>pĩ'k!</i> ground-hog	diminutive <i>pĩpĩ'ĩk!</i>
<i>q!ǝ'ǝtc</i> elk	<i>q!ǝq'!ǝ'ǝ'ǝtc</i>
<i>xá'ā</i> big clam	<i>xǝxá'ā'^a</i>

Though the last diminutive seems to correspond exactly in form and rhythm to the second, the final *-ā'^a* may perhaps here be better explained as breaking of the last vowel (*-ā*) of the stem (feature 2b).

Type III. Reduplicating Syllable: cê; stem: features 3a or d, 5a, 2b.

<i>qǎ'um'</i> eye	<i>qǝqawêm'*</i> (-ǝ- doubtless merely variant of -ǎ-)
<i>qwĩ'qwĩ</i> sea-gull	<i>qwĩ'qwĩ'qwĩ''ĩ</i>

Type IV. Reduplicating Syllable: cê; stem: features 4a, 3c, 2b.

<i>kwá'am</i> coiled storage basket	<i>kwǝkwĩ'ĩm'</i>
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Type V. Reduplicating Syllable: cê; stem: feature 5b.

<i>L!ĩkuĩnas</i> heart	<i>L!ĩL!kuĩnas</i>
<i>xápā'ĩ</i> red cedar	<i>xǝxpā'ĩ</i>

Type VI. Reduplicating Syllable: cê; stem: features 5b, 4b.

<i>qwāsam</i> woolly grouse	<i>qwǝq'ʷsǝ'm-ǝl</i>
<i>páxai'</i> creek	<i>pĩp'xǝ'ĩ</i>

Type VII. Reduplicating Syllable: cê; stem: features 5b, 3c, 2a.

<i>xāsam</i> box	<i>xǝxĩm'</i>
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Type VIII. Reduplicating Syllable: ce.

In this type the reduplicating *e* is unaccented. According to whether or not the stem is modified in regard to vocalic length or quality, various sub-types may be recognized.

Sub-type VIII a. Diminutive feature 1a only:—

<i>ts!âtcl!îbai</i> spruce	diminutive <i>ts!îts!âtcl!îbai</i>
<i>qâ'ya</i> water	<i>qeqâ'ya</i>
<i>qô'uqwai</i> speaker	<i>qwiqô'uqwai</i>

Here probably also belongs *qwi'qwâ't!alâ'k* "butterfly."

Sub-type VIII b. Diminutive features 1a, 5a (accent on third syllable of diminutive):—

<i>sayâ'ada</i> neck	<i>sîsîyâ'ada</i> (<i>sa</i> -shortened to <i>sA</i> -, which, coming before <i>y</i> , has to be palatalized to <i>sî</i> -)
<i>xâ'aidatc</i> stump	<i>xêxâ'â.idatc</i> (<i>-a.i-</i> probably equivalent to <i>-âi-</i>)

Sub-type VIII c. Diminutive features 1a, 3a (or c):—

<i>sâ'yal</i> lake	<i>sîsâ'yâl</i>
<i>mâ'tc!în</i> louse	<i>mîmâ'tc!în</i>

Sub-type VIII d. Diminutive features 1a, 4 b:—

<i>pôk'u pøk'u</i> liver	<i>pîpúk'u pî'k'u</i>
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Type IX. Reduplicating Syllable: ce; stem: feature 2a.

Here again the reduplicating vowel is an unaccented *e*. The stem, however, is characterized by the breaking of one of its vowels. According to whether or not umlaut also takes place, two sub-types are to be recognized.

Sub-type IX a. Diminutive features 1a, 2a:—

<i>tcâyac</i> hand	<i>tcîtcâ'yac</i>
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Sub-type IX b. Diminutive features la, 2a, 4a:—

xā'adjaic stone diminutive *xəxā'adjə'ic*

As irregular representative of this type may perhaps be considered:—

qē'n'qen' duck *qeqA'dd-ōl* (built on
unreduplicated simplex)

Type X. Reduplicating Syllable: eē.

Various sub-types are to be recognized, according to whether or not the stem vowels are quantitatively modified.

Sub-type X a. Diminutive feature lb only:—

<i>tc!ēl</i> rain	<i>tc!ētc!ēl</i>
<i>p!ēg^vāi</i> halibut	<i>p!ēⁱp!ig^vāi</i>
<i>ts!oxō''^o</i> codfish	<i>ts!ēⁱts!oxō'^o</i>
<i>L!Axwā'ⁱ</i> dog-salmon	<i>L!ēⁱL!Axwā'ⁱ</i>
<i>xā^ap!</i> baby-basket	<i>xē^exā^ap!</i>
<i>p!ōxō'^o</i> raven	<i>p!ēⁱp!ōxō'^o</i>
<i>yīp'ēⁱx^u</i> hole	<i>yē^eyīp'ēⁱx^u</i>
<i>L!p'ēⁱts!ā'^a</i> yellow-cedar bark	<i>L!ēⁱL!p'ēⁱts!ā'^a</i>
blanket	
<i>tītītītēⁱc</i> little owl	<i>tītītēⁱtītītēⁱc</i>
<i>k^vāck^vāc</i> bluejay	<i>k^vēⁱk^vāc</i>
<i>qōqōwēⁱm'</i> small breast feathers	<i>qōwē^equwēⁱm'</i>

In the last two examples the diminutive is formed, not from the already reduplicated simplex, but from the unreduplicated form abstracted from it.

Sub-type X b. Diminutive features lb, 3c:—

<i>L!pāⁱl</i> bag	<i>L!ē^eL!pāⁱl</i>
<i>tc!eq^e</i> robin	<i>tc!ēⁱtc!ē^eq^e</i>
<i>kūmāqin'</i> sea-lion	<i>kūⁱkūmāqin'</i>
<i>djīcin'</i> foot	<i>djēⁱdjīcin'</i>
<i>lāq!^u</i> bow	<i>lēⁱlāq!^u</i>

Sub-type X c. Diminutive features lb, 5a, 3c (or 3a):—

<i>q!wāt'ēⁱtcin'</i> humpback salmon	<i>q!wēⁱq!utēⁱtcin'</i>
<i>t!ā'abuxwāi</i> gooseberry bush	<i>t!ēⁱl!Amuxwāi</i>
<i>p!ā'alats!^a</i> skunk	<i>p!ēⁱp!ā'lāts!</i> (mis- heard for <i>-p!āl-?</i>)

Sub-type X d. Diminutive features 1b, 3e, 3c:—

<i>xāucīn'</i> bone	diminutive <i>xē^oxig^uicīn'</i> (-ig ^u i-< *-AWA-)
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It should be noted that this type of diminutive formation, while externally similar to Type VIII of plural formation (cf., e.g., *xē^oxā^ap!* "little basket" with *q!ēⁱq!āik^u* "eagles"), is in reality quite distinct in origin, the latter, as we have seen, tracing its reduplicating -ē- to -Ay- and being limited to nouns with *i*-diphthongs.

Type XI. Reduplicating Syllable: cē; *stem:* feature 2b.

<i>māt!āi</i> horse clam	<i>mē'mat!āⁱ</i> (mē'- perhaps misheard for mē-)
<i>hāihei</i> (<i>hāihei</i> '?) arrow	<i>hēheiheiⁱ</i>
<i>q!As'adāi</i> buckskin shirt	<i>q!ē^oq!as'adāⁱ</i>

Type XII. Reduplicating Syllable: cē; *stem:* 4b.

<i>q!ák^u</i> board	<i>q!ē^oq!ē^ok^u</i>
<i>aL</i> leggings	<i>ēⁱē^L</i>

Type XIII. Reduplicating Syllable: cē; *stem:* feature 5b.

There are two sub-types, according to whether or not the stem vowel is modified.

Sub-type XIII a. Diminutive features 1 b, 5 b:—

<i>q!áp!xwai</i> oak	<i>q!ēⁱq!p!xwai</i>
<i>p!ēⁱixāi</i> alder	<i>p!ēⁱp!ixāi</i>
<i>L!ā^aq!wāi</i> fish-gill	<i>L!ēⁱⁱL!q!wāi</i>
<i>kúp-ā^umī^uṣ^u</i> hill	<i>kwiⁱk^up-ēⁱtⁱ</i>
<i>lāq!wāinōp'</i> cedar-bark mat	<i>lēⁱlq!wāinōp'</i>
<i>t!ēⁱibāi</i> wild-cherry bush	<i>t!ēⁱt!bāi</i>
<i>t!Aqⁱt!Aqāi</i> dog-wood	<i>t!ēt!qāi</i>

In the last example the diminutive is built up on the unduplicated stem abstracted from the already reduplicated simplex. The broken stem vowels -ēⁱ- of "alder" and "wild-

cherry bush'' disappear in the diminutive apparently without trace of ', but this may in part be due to following *q!* and *p!*, which imply '. With these contrast:—

sá'an' cohoe salmon diminutive *sís'ad-ōl*

Here the *-a'a-* is treated, not as a broken vowel, but as two vowels with intervening consonant.

Sub-type XIII b. Diminutive features 1b, 5b, 3c:—

<i>lāq!as</i> mountain-goat blanket	<i>lī'l'q!is</i>
<i>L!āq!acin''</i> moccasins	<i>L!ē°L!q!acēn'</i> (mis- heard for <i>-ēn''?</i>)

Type XIV. Reduplicating Syllable: *cē*; *stem:* features 5a, 3c, 2b.

<i>t!ég°em</i> sun, moon	<i>t!i't!ig°im'</i>
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-i- is for *-A-*, because of following *g°*.

Type XV. Reduplicating Syllable: *cē*; *stem:* features 5b, 4a.

<i>sAQ'āk'°u</i> war-club	<i>sť'sqēk'°u</i>
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Type XVI. Reduplicating Syllable: *cē'*.

<i>qā'°qa'</i> rush mat	<i>qē'°qā'°a</i>
<i>tōt'x°lal</i> necklace	<i>tē'°t'x°lal</i>

The diminutive of "necklace," as often happens with nouns reduplicated to begin with, is built up on the implied unreduplicated stem. The same applies to the diminutive of "rush mat," except that here it is the reduplicating syllable of the simplex, which doubtless more nearly represents the simple stem, that is taken as the base of the diminutive form.

Type XVII. Reduplicating Syllable: *cē'*; *stem:* feature 4a or b.

Two sub-types are found, according to whether or not there are at the same time quantitative changes in the stem.

Sub-type XVII a. Diminutive features 1c, 4b:—

<i>q!ā^aL!</i> land-otter	diminutive <i>q!ē^eq!ē^eL!</i>
<i>q!ā^asa'</i> sea-otter	<i>q!ē^eq!ē^es</i> (note loss of -a')

Sub-type XVII b. Diminutive features, 1c, 5a, 4a (or b):—

<i>qē^ew^Ax</i> steel-head salmon	<i>qē^eqeg^ee^x</i>
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-g^v- is from original -w-. It is not clear whether -qeg^ee^x represents *-qēwē^ex or *-qēwēx. —

Type XVIII. Reduplicating Syllable: cé; stem: features 3c, 2b.

<i>q!wát'Δm</i> river	<i>q!wé^eq!wat'ím'</i> (<i>q!wé^e</i> - not equivalent to <i>q!wê^e</i> -; see diminutive plural iv)
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Type XIX. Reduplicating Syllable: cé'; stem: feature 5b.

There are two sub-types, the latter with modified stem vowel.

Sub-type XIX a. Diminutive features 1c, 5b:—

<i>sāpāxos</i> horn	<i>sē^esp'xos</i>
<i>hēq'sā^amin'</i> pole for poling canoe	<i>hē^ehēq'sā^amin'</i>

Sub-type XIX b. Diminutive features 1c, 5b, 3c:—

<i>t!ākqm'</i> beaver (-kq- doubt- less for -kwA-)	<i>t!ē^et!kwīm'</i>
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Type XX. Reduplicating Syllable: cǎ.

Here again there are two sub-types, the latter with vocalic reduction.

Sub-type XX a. Diminutive feature 1d:—

<i>xāug^uas</i> grizzly bear	<i>xāxāug^uas</i>
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Here probably belongs also *xwáxadjō'm'* "fly."

Sub-type XX b. Diminutive features 1d, 5a, 3c or d:—

<i>lā^ag^vēt!^a</i> herring	<i>lālig^vēt!^a</i> (-i- < -A-)
<i>lāidatctAn</i> woman's cedar-bark	<i>lālīdatctīn</i> (-ī- < -Ai-)
skirt	
<i>t!ō'mt'</i> paddle	<i>t!ōt!Abī't'</i>

Type XXI. Reduplicating Syllable: cǃ; stem: feature 5b.

There are three sub-types, based on differences in the further treatment of the stem.

Sub-type XXI a. Diminutive features 1d, 5b:—

yǎxai' pack-basket diminutive *yá.ɪxai'*

Sub-type XXI b. Diminutive features 1d, 5b, 3a:—

waxǎʔts!i pipe *wauxǎʔts!i*

Sub-type XXI c. Diminutive features 1d, 5a, 5b:—

tǃkǃmǎn bailer *tǃlkǃmǎn*

Type XXII. Reduplicating Syllable cǃ; stem: features 3a or c, and 2b.

There are two sub-types, depending on whether or not the first vowel of the stem is reduced.

Sub-type XXII a. Diminutive features 1d, 3c, 2b:—

sǎts!ǎm tyee salmon *sas'ǎʔts!ǎ'm*

Sub-type XXII b. Diminutive features 1d, 5a, 3a, 2b:—

sǎ'ǎdjǎ' leaf *sasǎdjǎ'^a* (*-ǎ-* reduced from *-ǎ'ǎ-*)

Type XXIII. Reduplicating Syllable: cǃ; stem: features 5a, 3a or c.

k!ǃdǃdǃt!ǃ porpoise

mǎyǃs raccoon

tǎ'ag^vǎx^u fern

tǎ'ag^vǎn salmon-spear

g^vǎ^adǎ'm slave

k!ǃk!ǃdǃt!ǃ

mǎmǎyǃs (*-ǎ-* palatalized from *-ǎ-*, reduced from *-ǎ-*)

tǎtig^vǎx^u (*-ǎ-* palatalized from *-ǎ-*, reduced from *-ǎ'ǎ-*)

tǎtig^vǎn (dit.)

g^vǎg^vǎdǎ'm (*-ǎ-* palatalized from *-ǎ-*, reduced from *-ǎ^a-*)

lā^adak^u skin
 āsɣ^u hair-seal
 ts!āmuql cloud

diminutive lālidā^ak^u (dit.)
 'ā'asɣ^u
 ts!āts!ImAqwił (-I-
 palatalized from -A-,
 reduced from -ā-;
 -mA- merely vari-
 ant of -mu-)
 'ō'olqaiⁱ
 'ā'^Amax^uidjō^o

ōlqaiⁱ snake
 'āmax^uidjō^o ant

In the last two examples the final vowel is considered quantitatively long and hence cannot be further lengthened. Quite irregular is:—

tāyac killer-whale tātīyac

The long -ī- and the short -ā- of the stem are the exact reverse of what would be expected (*tātīyāc, cf. tātīg^uāɣ^u above).

Type XXIV. Reduplicating Syllable: cċ; *stem:* features 5a, 4b.

tc!atc!ā^a!ān^u mouse tc!ātc!il!in^u (-i- pal-
 atalized form of -A-,
 reduced from -ā^a-)

The diminutive, as often, is based on the unreduplicated stem abstracted from the already reduplicated simplex.

Type XXV. Reduplicating Syllable: cċ; *stem:* features 5a, 2b

Two sub-types are to be recognized, depending on the treatment of the last vowel of the stem.

Sub-type XXV a. Diminutive features 1a, 5a, 2b:—

lō''bōm^u small clam lōl'bō'm^u
 k!ōyōkōbīⁱn fisherman k!ōk!ōyōkōbīⁱn^u

Sub-type XXV b. Diminutive features 1e, 5a, 3a, 2b:—

xā^a'wa fur seal xāxAWā'a
 sā^a'ba^u mussel sāsAbā^a
 tc!é'ādō dog tc!é'ātcl'idō^o (-i- pala-
 talized from -A-, re-
 duced from -e'ā-)

In the last example -e'ā is treated as a reduplicating long vowel.

Type XXVI. Reduplicating Syllable: cĕ; stem: feature 5b.

Three sub-types are to be recognized, according to whether the stem undergoes no further change or is further modified.

Sub-type XXVI a. Diminutive features 1e, 5b:—

<i>sōsĭn'</i> mouth	diminutive <i>sōssĭn'</i>
<i>p!āq!Adātc</i> goose	<i>p!āp!q!Adātc</i>
<i>tĭ'hā'dān'</i> chief's wife	<i>tĭt'hā'dān'</i>
<i>sōpAdatc</i> tail	<i>sō'spAdatc</i>
<i>xwāsAbāi</i> soapberry bush	<i>xwāx'sabāi</i>
<i>tĭx'sat</i> tongue	<i>tĭ'tx'sat</i>
<i>ōsā'i</i> huckleberry bush	<i>'ō'Asā'i</i> (-'ōs- cannot be further reduced than -'As-)
<i>mĭxāl</i> bear	<i>mĭ'mexāl</i> (-E- is mere- ly glide)
<i>sĭp!Amĭn'</i> shinny stick	<i>sĭ'sp!Amĭn'</i>
<i>mĭtāli</i> beaver-tooth die	<i>mĭ'm(ĭ)tāli</i> (-ĭ- is merely glide)
<i>kʷ!ikʷāyu</i> oar	<i>kʷ!ĭ'kʷ!kʷāyu</i>
<i>sĭ'eqet'</i> dug hole, well	<i>sĭ'isqet'</i>

"Bear," "shinny stick," "beaver-tooth die," and "oar," which have short stem-vowels, are perhaps better listed with type X.

Sub-type XXVI b. Diminutive features 1e, 5b, 3c:—

<i>kō'sAd'</i> star	<i>kōk'sid'</i>
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Sub-type XXVI c. Diminutive features 1e, 5b, 5a, 3a:—

<i>t!ē'e'dēqwai</i> salmon-berry bush	<i>t!ēt!dāqwāi</i>
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Type XXVII. Reduplicating Syllable: cĕ; stem: features 5 b, 4 b.

<i>t!ā'q!at'</i> mountain	<i>t!āt!q!ē'it'</i>
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Type XXVIII. Reduplicating Syllable: cĕ; stem: features 5b (or a), 3a, 2a.

<i>tā'q!wa'</i> devil-fish	<i>tāt'q!wā'a</i>
<i>djā'dja'</i> tree	<i>djādji'djā'a</i> (-i- pal- atalized from -A-, reduced from -ā'a-)

Type XXIX. Reduplicating Syllable: ca.

Two sub-types have been found illustrated, each represented by but one example in the material obtained.

Sub-type XXIX a. Diminutive features 1f, 3c, 2b:—

Lálí'Am' cockle diminutive *Lálí'í'm'*

Sub-type XXIX b. Diminutive features 1f, 3b, 2a:—

kwúdjāk^u trout *kwakwá^adjāk^u*

Type XXX. Reduplicating Syllable: cā; stem: feature 3f.

Two sub-types may be recognized, the second with further modification of the stem.

Sub-type XXX a. Diminutive features 1g, 3f:—

q!wá'ix wood *q!wáq!wá'djix* (-dj-
 <*-y-, glide between -á'- and -i-).

Sub-type XXX b. Diminutive features 1g, 3f, 3c:—

dʒiŋqʷin 'song' (< **dʒAWAn*')

Type XXXI. Reduplicating Syllable: cṽ'ṽ; stem: feature 5b.

sält'u woman

sā'astt'u girl

L!á'at'ō'm' wolf

$$L! \hat{a}' a_L! \{ \bar{o}' m'$$

Type XXXII. Reduplicating Syllable: co; stem: feature 4c.

Two sub-types, each represented by one example, are found, the second involving a further change of stem.

Sub-type XXXII a. Diminutive features 1i (perhaps rather 1
d), 4c:—

tō'mic man

totă'amic boy

Sub-type XXXII b. Diminutive features 1i, 4c, 3d:—

L!Am's house

L!oL!ã'amî's

Diminutive in -ōl, -ol.

Besides forming diminutives by means of reduplication and internal stem change, Comox can also make diminutives of animal nouns by means of a suffix $-\bar{o}l(t^u)$ or $-\phi l(t^u)$. Some of the diminutives in $-\bar{o}l(t^u)$ or $-\phi l(t^u)$ are nouns whose simplex is

already reduplicated (cf. reduplicated nouns which form no reduplicated plural), yet not all. Of those formed from unre-duplicated nouns, some have diminutive reduplication at the same time, others not. By an interesting phonetic law of rhythmic balance $-\delta l(t^u)$ is suffixed to stems whose last vowel is short, $-\phi l(t^u)$ to those whose last vowel is long. The examples obtained of the suffix are:—

1. $-\delta l(t^u)$ *hew^aqen'* swan*mî'ema*u cat*q!âik^u* eagle*qé'n'qen'* duck*ts!îtsq!é'enas* chicken hawk*tc!eq^x* robin*sá'an'* coho salmon*xôp'xôp'* humming bird*g^uî'g^uî'* pantherdiminutive *hew^aqádôl**mî'emin'ôl*{ *q!âikôl*{ *q!eq!Auq!âikôl*

little eagles

*qeqA'ádôl**ts!îtsq!é'enasôlt^u**tc!îtc!eq^xtc!éqôlt^u* little
robins{ *sîs'adôl*{ *sîsôsô'ádôl* plur.*xôp'xôpôlt^u**g^uî'g^uîyûl*

The last two seem irregular as regards rhythmic balance; perhaps they were respectively misheard for **xôp'xôpôlt^u* and **g^uî'g^uîyûl*. $-\delta l$ has also been found in *mîm'inl'ôl k^u mámstcô'm* "little mink."

2. $-\phi l(t^u)$ *hô'mhō'm* blue grouse*qwâqumî's* marten*qwâsAm* woolly grouse*ts!î'x^uts!îx^u* fish-hawk*kwa'kwâ'adjô'* grey-squirrel*hô'mhō'môl**qwâqumî'sôlt^u**qwêq^usê'môl**ts!î'x^uts!îxwôl**kwa'kwâ'adjôl*

V. DOUBLY REDUPLICATED DIMINUTIVE PLURALS OF NOUNS.

The plurals of diminutives are, as a rule, doubly reduplicated, the first reduplicating syllable expressing the diminutive idea, the second that of plurality; the first reduplicating syllable is almost invariably of diminutive type, the second of plural type. Hence diminutive plurals are morphologically, and psychologically, diminutivized plurals, not pluralized diminutives. While they may be said, on the whole, to be formed from the plural of the simplex, the diminutive singular has often influence on the form of the diminutive plural, both as regards the inner stem changes and the vowel of the reduplicating syllable. Thus diminutive plurals may be said to combine, roughly speaking, the characteristics of both the plural and diminutive of the simplex. In order better to understand the formation of the diminutive plural and to assist in cross-referencing, the types to which the non-diminutive plural and the diminutive singular belong will be indicated in the following lists.

Type I. Reduplicating Syllable: cē; followed by plural of simplex.

The reduplicating syllable is analogous to that of diminutive types X, XI, XII, XIII, XIV, and XV. According to whether or not the remaining part of the word is somewhat modified from the plural of the simplex, sub-types may be recognized.

Sub-type I a. Plural of simplex unchanged:—

<i>L!ikuinas</i> heart	plur. I.	dim. v.	dim. plur. <i>L!i' L!Ek'-</i> <i>L!ikuinas</i>
<i>ts!oxó''o</i> codfish	dit.	x a	<i>ts!its!oxts!óxó''o</i>
<i>L!Axwā'i</i> dog-salmon	dit.	dit.	<i>L!i L!axL!Axwā'i</i>
<i>L!pî'ts!ā'a</i> yellow cedar			
bark basket	dit.	dit.	<i>L!i L!Ap' L!Apîts!ā'a</i>
<i>tc!éq^x</i> robin	no plur.	x b.	
	(type I implied in dim. plur.)		<i>tc!tc!eq^xtc!éqōlt''u</i>
<i>aL</i> leggings	I. (or VI.)	XII.	<i>ē' aL' aL</i>
<i>kúpû'mî'x^u</i> hill	dit.	XIII a.	<i>kwîkup' kúp-î't^e</i> (with -î't ^e as in diminutive singular)

<i>sá'įdja'</i> leaf	plur. VIII.	dim. XXII b.	dim. plur. <i>sīsīsá'įdja'</i>
<i>djā^adja'</i> tree	irregular	XXVIII.	<i>djēdjīdjā^adja'</i> (built on plur. of type VIII)
<i>yīp'ī'x^u</i> hole	IX.	X a.	<i>yēyīp'yīp'ī'x^u</i> (built on plur. of type I)

Sub-type I b. Plural of simplex modified by diminutive feature 3a, c, or d :—

<i>djīdis</i> tooth	I.	I b.	<i>djīdjīiddjīdī's</i>
<i>L!pātīl</i> bag	dit.	X b.	<i>L!īL!Ap' L!Āpātīl</i>
<i>djīcin'</i> foot	dit.	dit.	<i>djīdjīsdjīcin'</i>
<i>lĀq!As</i> mountain- goat blanket	dit.	XIII b.	<i>līlĀq!lĀq!īs</i>
<i>L!Āq!acin'</i> mocca- sin	dit.	dit.	<i>L!ēL!Āq!L!Āq!acīn'</i> (-īn' misheard for -īn' ?)
<i>t!Ākōm'</i> beaver	I.	XIX b.	<i>t!t!Āk'ut!Ākwīm'</i>
<i>t!ō'mt'</i> paddle	II a.	XX b.	<i>t!t!Āmt!ō'bt'it'</i>
<i>waxāts!i</i> pipe	dit.	XXI b.	<i>wīwāxwaxāts!i'</i>
<i>tā^aq!wa'</i> devil-fish	dit.	XXVIII.	<i>tītĀ'q'tā^aq!wā'</i> (-q' misheard for -q! ?)
<i>djīgvin'</i> song	III b.	XXX b.	<i>djīdjūdjīgvin'</i>

Sub-type I c. Plural of simplex modified by diminutive feature 5a:—

<i>tōkō^omīn</i> bailer	V.	XXI c.	<i>tītūk'tōkō^omīn</i>
<i>tī'hā^adān'</i> chief's wife	VI.	XXVI a.	<i>tītāhtihā^adān'</i>

Sub-type I d. Plural of simplex modified by diminutive feature 2b:—

<i>tō''^obōm'</i> small clam	II b.	XXV a.	<i>tītīmō''^obō'm'</i>
<i>k!ōyōkōbīⁱn</i> fisher- man	VIII.	dit.	<i>k!wīk!wīk!ōyōkō- bīⁱn'</i>

Sub-type I e. Plural of simplex modified by diminutive feature 4b:—

t!ā'q!at' mountain plur. II a. dim. XXVIII.
dim. plur. *t!ēt!Aq!t!ā'q!ē't'*

Sub-type I f. Plural of simplex modified by diminutive features 3b, 2a, 3c:—

kūmāqin' sea-lion I. 'x b. *kwiikumkwā'māqin'*

A couple of aberrant diminutive plurals with *cē-* are given under type II f.

Type II. Reduplicating Syllable: *cē;* followed by plural of simplex.

The reduplicating syllable is analogous to that of diminutive types I, II, III, IV, V, VI, VII, VIII, IX. Sub-types are to be recognized here as in type I.

Sub-type II a. Plural of simplex unchanged:—

<i>qwađi's</i> hump-			
backed whale	I.	I a.	<i>qweqwađ' qwađi's</i>
<i>qō'u'a'i</i> hemlock	dit.	dit.	<i>qwiqōqō'u'a'i</i>
<i>'āwāk'u</i> tobacco	dit.	dit.	<i>'ē'Aw'āwāk'u</i>
<i>xāpā'i</i> red cedar	dit.	v.	<i>xexAp'xāpā'i</i>
<i>q!áp!xwai</i> oak	dit.	XIII a.	<i>q!ēq!Ap!q!áp!xwai</i>
<i>q'tā'abas</i> wooden ball			
used in game	II a.	I a.	<i>qeqāt'q'tā'abas</i>
<i>qē'n'qen'</i> duck	dit.	IX b.	<i>qeqād'qēn'</i> (based on unreduplicated simplex)
<i>qā'aqa'</i> rush mat	dit.	XVI.	<i>qeqaq'qā'aqa'</i>
<i>tōt'x'lał</i> necklace	dit.	XVI.	<i>tītAx'tōt'x'lał</i> (reduplicating syllable for plurality based on unreduplicated form of simplex)

<i>q!ā^aL!</i> land-otter plur.	II a. dim.	XVII a. dim.	plur. <i>q!eq!AL!q!ā^aL!</i>
<i>q!ā^asa'</i> sea-otter	dit.	dit.	<i>q!eq!Asq!ā^as</i> (with loss of -a', as in dim. sing.)
<i>xā^a'wa</i> fur seal	dit.	XXV b.	<i>xēxauxā^a'wa</i>
<i>sā^a'ba'</i> mussel	dit.	dit.	<i>sīsamsā^a'ba'</i>
<i>xwāsAbāi</i> soapberry			
bush	dit.	XXVI a.	<i>xwēxwāsxwāsAbāi</i>
<i>p!āq!Adātc</i> goose	dit.	dit.	<i>p!ēp!Aq!p!ā^aq!A-dātc</i>
<i>L!ā'al'ō'm'</i> wolf	dit.	XXXI.	<i>L!ēL!āL!ā'al'ō'm'</i>
<i>ts!ātclilbai</i> spruce	II b.	VIII a.	<i>ts!its!itc!ts!ātclilbai</i>
<i>k^uāck^uāc</i> bluejay	dit.	X a.	<i>k^uāck^uīck^uāc</i> (based on unreduplicated form of simplex)
<i>sāpāxos</i> horn	dit.	XIX a.	<i>sīsīpsāpāxos</i>
<i>tā'ag^uax^u</i> fern	III a.	XXIII.	<i>tītōtā'ag^uax^u</i>
<i>hēg^uos</i> chief	III b.	I c.	<i>hēhō^uhē^ug^uos</i>
<i>xāug^uas</i> grizzly bear	V.	XX a.	<i>xēxauxāug^uas</i>
<i>hēq'sā^amin'</i> pole for			
poling canoe	VI.	XIX a.	<i>hēhāq'hēq'sā^amin'</i>
<i>q!ōa'āda</i> ear	VII.	I a.	<i>q!wēq!q!ōa'āda</i>
<i>sīdjāqō'p'</i> basket			
hat	VIII.	I a.	<i>sīsīsīdjāqō'p'</i>
<i>tāyac</i> killer whale	XI	XXIII	<i>tītītā^ayac</i>
(plur. of type VIII implied in dim. plur.)			

Sub-type II b. Plural of simplex modified by diminutive feature 3c or d:—

<i>qāl'q!</i> warrior	I.	I b.	<i>qēqalqāl'ēq!</i>
<i>lāq!^u</i> bow	dit.	X b.	<i>līlāq!^ulīēq!^u</i>
<i>q!wāt'ī'tcin'</i> hump-back salmon	dit.	X c.	<i>q!wēq!wāt'q!wāt'ī'tcin'</i>
<i>xāucīn'</i> bone	dit.	X d.	<i>xēxauxāucīn'</i>
<i>mā^atc!īn'</i> louse	II a.	VIII c.	<i>mīmātc!mā^atc!īn'</i>
<i>ās^ux^u</i> hair seal	dit.	XXIII.	<i>'ē'As'āsīx^u</i>
<i>tā'ag^uīn</i> salmon spear	III a.	dit.	<i>tītōtā'ag^uīn</i>

Sub-type II c. Plural of simplex modified by diminutive features 3a or c, and 2b:—

<i>xāsām</i> box	plur. I.	dim. VII.	dim. plur. <i>xəxasxāsīm'</i>
<i>qwāsām</i> woolly grouse	dit.	VI.	<i>qwequsqūsīm'</i> (-qus- probably merely variant of -qwas-)
<i>q!ās'adāi</i> buckskin shirt	dit.	XI.	<i>q!eq!Asq!ās'adā'i</i>
<i>lī'ām'</i> cockle	dit. (or VIII.)	XXIX a.	<i>līlī'lāi'īm'</i> (with irregular lengthen- ing of -ī' = -ai- to -āi-)
<i>hēw^Aqen'</i> swan	II a.	-ōl	<i>həhauhēw^aqēn'</i>
<i>māt!āi</i> horse clam	dit.	XI.	<i>mēmāt!māt!ā'i</i>
<i>qā'um'</i> eye	V.	III.	<i>qeqoqā'ōm'</i> (-qq- heard for -qau-, or perhaps for -qau- reduced from-qau- —see type III)

Sub-type II d. Plural of simplex modified by diminutive feature 4a or b:—

<i>pāxai'</i> creek	I.	VI.	<i>pīpāxpa xē'i</i>
<i>q!āk'^u</i> board	dit.	XII.	<i>q!eq!ak'^uq!ē'k'^u</i>
<i>sAQ'āk'^u</i> war-club	dit.	XV.	<i>sīsAQ'sAQēk'^u</i>

Sub-type II e. Reduplicating syllable of plural of simplex changed to *CAU*:—

<i>xā'ā</i> big clam	I.	II.	<i>xəxau xā'A</i> (note change of <i>xā'ā</i> - to - <i>xā'a</i> , perhaps due to rhythmic anal- ogy of dim. sing. <i>xəxA'ā'A</i>)
<i>q!āik'^u</i> eagle	VIII.	-ōl	<i>q!eq!Auq!āik-ōl</i>

These strange diminutive plurals can hardly be explained otherwise than as formed by analogy of such diminutive plurals as *xəxauxā'wa* "little fur seals," *xəxauxāug'as* "little bears," and *xəxauxauč'n* "little bones," where *-xau-* (*-xau-*) is etymologically justified. The parallelism of *xā'ā* "big clam" and *xā'a'wa* "fur seal" seems particularly plausible.

Sub-type II f. Plural of simplex modified by diminutive feature 4c (for convenience of comparison one form with *cē* is included):—

<i>t!ē'ibāi</i> wild cherry	plur. I (or VIII).	dim. XIII a.	dim. plur.
bush			<i>t!ēt!Amt!ā'abāi</i> (really belongs to type I; based on reduplicated plural of type II)
<i>qé'w⁴x</i> steel-head	II.	XVII b.	
salmon			<i>qeqauqā'ag'ē^ex</i> (<i>-g'ē^ex</i> as in dim. sing.)
<i>tī'x^u</i> yellow cedar	VIII.	I b.	<i>tītōtā'ayīx^u</i> (<i>tī'x^u</i> > <i>*tīyīx^u</i> , <i>tī-</i> being modified to <i>tā'a-</i> ; <i>-tō-</i> , cf. type II e, is peculiar and is probably due to analogy of <i>tītōtā'-ag'ax^u</i> "little ferns")

Another diminutive plural with erratic *-ō-* vowel (in both reduplicating syllable for plurality and stem) belonging to type I, is:—

<i>sā'an</i> cohoe salmon	I.	XIII a.	<i>sīsōsō'ād-ōt</i>
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The material at hand does not permit to see what analogies have operated here.

Type III. Reduplicating Syllable: cē; reduplicating vowel of plural of simplex shortened.

A new feature is here introduced, the shortening of the long reduplicating vowel characteristic of the plural. Sub-types are here also to be recognized.

<i>Sub-type III a.</i> Plural of simplex not otherwise modified:—			
<i>xōp'xōp'</i> humming bird	plur. I.	dim. -ōlt' ^u	dim. plur. <i>xwəxōp'xō'p'</i> (based on unreduplicated simplex)
<i>tā^ag^uēt!^a</i> herring	III b.	xx b.	<i>l̥l̥ōl̥ā^ag^uēt!^a</i>
<i>tā^adak'^u</i> skin	III b.	xxiii.	<i>l̥l̥ōl̥ā^adak'^u</i>
<i>qā'ya'</i> water	viii.	viii a.	<i>qeqeqā'ya'</i>
<i>xā'a.idatc</i> stump	I.	viii b.	<i>xəxəxā'aidatc</i>
	(type VIII implied in dim. plur.)		
<i>sā'yal</i> lake	viii.	viii c.	<i>sīsīsā'yal</i>
<i>lāidatctān</i> woman's cedar-bark skirt	dit.	xx b.	<i>l̥l̥l̥l̥āidatctān</i>

Sub-type III b. Plural of simplex modified by diminutive feature 2a:—

<i>tcāyac</i> hand	viii.	ix a.	<i>tc̥t̥c̥t̥cā'yac</i>
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Sub-type III c. Plural of simplex modified by diminutive features 2a, and 3b or f:—

<i>sayā'ada</i> neck	viii.	viii b.	<i>sīsīsā'yā'ada</i>
<i>kwūdjak'^u</i> trout	dit.	xxix b.	<i>kw̥ikw̥ikwā'ādjak'^u</i>

Sub-type III d. Plural of simplex modified by diminutive features 4a and 2a:—

<i>xā'adjaic</i> stone	viii.	ix b.	<i>xəxəxā'adje'ic</i>
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Type IV. Reduplicating Syllable: cê; followed by simplex.

It seems that a reduplicating syllable with ê tends to be considered the morphological equivalent of double reduplication (see plural type X, diminutive type XVI), in this case of combined diminutive and plural reduplication. Various sub-types are to be recognized, according to whether the reduplicating syllable is followed by the unmodified (or modified) simplex, the modified form characteristic of the diminutive, or by a form still further modified.

Sub-type IV a. Simplex unchanged:—

<i>p!ê'ixāi</i> alder	plur. I. (or VIII).	dim. XIII a.	dim. plur. <i>p!êp!ê'ixāi</i>
<i>L!ams</i> house	dit.	XXXII b.	<i>L!ê'eL!ams</i>
<i>mô'qs</i> hand	no plur.	I a.	<i>mê'mô'qs</i> (may also be considered as belonging to type IV b)

Sub-type IV b. Simplex modified by diminutive feature 5a:—
tc!ê'ādô dog II b. xxvb. *tc!ê'tc!in'ām'* (ir-
regular in that -ô
of stem is dropp-
ed; with -ām' cf.
perhaps -ā'm of
djādjiā'm 'trees')

Sub-type IV c. Reduplicating vowel of diminutive changed to ê:—

<i>xwáxwadjō'm'</i> fly (dim. in form)			<i>xwê'xwadjō'm'</i>
<i>qwi'qwā't!Alā'k'</i> butterfly (dim. in form)			<i>qwê'qwā't!Alā'k'</i>
<i>māqsīn'</i> nose	I.	I b.	<i>mê'māqsī'n</i>
<i>kwá'am</i> coiled storage basket	dit.	IV.	<i>kwê'kwī'īm'</i>
<i>q!wát'am</i> river	dit.	XVIII.	<i>q!wê'q!wat'īm'</i>
<i>tīx'sal</i> tongue	II b.	XXVI a.	<i>tê'tīx'sal</i>

Sub-type IV d. Reduplicating vowel of diminutive changed to ê; stem further modified by diminutive features 5a and 3c:—

[illegible]

Sub-type IV e. Reduplicating vowel of diminutive changed to ê; stem further modified by diminutive feature 5b:—

<i>sâts!Am</i> tyee sal-	II a.	XXII a.
mon		<i>sê'ests!i'm'</i>

Type V. Reduplicating Syllable: cê; followed by plural of simplex modified by diminutive features 5a and 3a:—

t!é'ew *dé^eqwai* salmon- plur. II a. dim. XXVI c. dim. plur.
berry bush *t!é't!Ant!An'qwāi*
(-*é^e*- is lost, cf.
diminutive feature
5 b)

sôsîn' mouth II.b. XXVI a. *sê'sôssîn'*

VI. MISCELLANEOUS LINGUISTIC MATERIAL.

NUMERALS.

- | | | |
|-----------------------------------|------------------------------|-------------------------------|
| 1. <i>pā'a</i> | 11. <i>ōp'ān haik'u pā'a</i> | |
| 2. <i>sā'a</i> | 20. <i>simcyā'a</i> | 200. <i>sā'mitc</i> |
| 3. <i>tcālas</i> | 30. <i>tcanaux'cyā'a</i> | 300. <i>tcā'adag'itc</i> |
| 4. <i>mōs</i> | 40. <i>mōsalcyā'a</i> | 400. <i>mōsā'ag'itc</i> |
| 5. <i>sīyātci's</i> | 50. <i>sēyats'alcyā'a</i> | 500. <i>sēatsā'ag'itc</i> |
| 6. <i>t'āxam</i> (or- <i>ab</i>) | 60. <i>t'āxamalcyā'a</i> | 600. <i>t'axamā'ag'itc</i> |
| 7. <i>ts!ō'u'tcī's</i> | 70. <i>ts!ōtci'alcyā'a</i> | 700. <i>ts!ōtci'sā'ag'itc</i> |
| 8. <i>tā'atcī's</i> | 80. <i>tā'atci'salcyā'a</i> | 800. <i>tā'atci'sā'ag'itc</i> |
| 9. <i>tig'ix'u</i> | 90. <i>tig'ix'walcyā'a</i> | 900. <i>tig'ix'wā'ag'itc</i> |
| 10. <i>ōp'ān</i> | 100. <i>t'sā'itc</i> | 1000. <i>t'sā'ag'itc</i> |
- 2000 is *sāba t'sā'ag'itc* or *sā'a t'sā'ag'itc*.

Numerals with classifying suffixes, referring to class of objects counted, are:—

	People	Canoes	Fathoms	Houses	Dollars
1.	<i>pá'pá'a</i>	<i>nac/dá'g^uvil</i>	<i>nac/dá'x^utāl</i>	<i>nac/dá'xwáutx^u</i>	<i>páq'qs</i>
2.	<i>sá'sá'a</i>	<i>sábá'g^uvil</i>	<i>sá'mtāl</i>	<i>sá'ábautx^u</i>	<i>sáq'qs</i>
3.	<i>tcá'lāy</i>	<i>tcá'dá'g^uvil</i>	<i>tcá'dá'x^utāl</i>	<i>tcá'dá'utx^u</i>	<i>tcá'lasqs</i>
4.	<i>mósāyi</i>	<i>mósāul</i>	<i>mósāltāl</i>	<i>mósāutx^u</i>	<i>mósqs</i>
5.	<i>séyatsāyi</i>	<i>séyatsā'g^uvil</i>	<i>séyatsāltāl</i>	<i>séyatsāutx^u</i>	<i>séyatsqs</i>
6.	<i>lázamāyi</i>	<i>lázamā'g^uvil</i>			
7.	<i>ts!ótciāyi</i>				
8.	<i>ta'átciāyi</i>				
9.	<i>tigv!xwāyi</i>				
10.	<i>ópānāyi</i>				

The series for “dollars” refers, properly speaking, to round objects, including such objects as heads and turnips.

BODY-PART SUFFIXES. Examples of body-part “substanti-vals,” as they have been termed by Boas, which occur only in composition (better perhaps derivation), are:—

- head:* *páq·ē'g^uwan'* white-headed
tcíx·ē'g^uwan' red-headed
 (or *-ad'*)
- hand:* *páq·ō'^udja'* white-handed
tcíxō'^udja' red-handed
- eye:* *páq·āqs* white-eyed
páq'paq'āqs white-eyed (plur.; refers to several persons
 or to two eyes of one person)
tcíxāqs red-eyed
tcíx'xcíxāqs red-eyed (plur.)
- nose:* *ts!áts!ē'miq^u* red-nosed
páq·ē'g^u white-nosed
t!át'ts!ā'^umiq^u nose bleeds
- foot:* *páq'cin'* white-footed
páq'paq'cin' white-footed (plur.)

With these contrast independent use of “ear” in *páq'paq'q!qa'āda* “white ears.”

POSSESSIVE AND SUBJECTIVE PRONOUNS. Only very fragmentary data were secured on Comox pronouns. I do not consider them as particularly reliable.

<i>tatsɪ mŋ'qs</i> my head	<i>tamsi mŋ'qs</i> our heads
<i>tAN mŋ'qs</i> your head	<i>tA mŋ'qsap'</i> your (plur.) heads (visible)
<i>tA mŋ'qss</i> his head (visible)	<i>ku mŋ'qsap'</i> your (plur.) heads (invisible)
<i>ku mŋ'qss</i> his head (invisible)	

tA and *ku* are articles implying visibility and invisibility respectively. Possessive pronouns modifying verb subjects are:—

- 'ā *tsɪ mŋ'qs* my head is sore ('ā' to be sore)
- 'ā' *tAN mŋ'qs* your head is sore
- 'ā' *tA mŋ'qss* his head is sore
- 'ā *tA mŋ'qss tA sāl't*^u the woman has headache (literally, sore the her-head the woman)

Possessive pronouns modifying verb objects are:—

- tc'k!úda wad tsɪ mŋ'qs* I see my head
- tc'k!údaɣwad das mŋ'qs* I see your head
- tc'k!údaɣwad dA mŋ'qss* I see his head
- tc'k!údaɣwad das tc'k!tcāyac* I see your hands
- tc'k!údaɣwad dA tc'k!tcāyacs* I see his hands

Subjective pronominal suffixes are:—

- t̥t̥c tō'mic* I am a big man (*t̥t̥* big)
- t̥t̥^atc^u tō'mic* you are a big man
- t̥t̥^a tō'mic* he is a big man
- t̥t̥^adjan sāl't*^u I am a big woman
- t̥t̥^adjaux^u sāl't*^u you are a big woman

VII. COMPARATIVE NOTES ON SALISH NOUN REDUPLICATION.

This is not the place to enter into anything like a systematic comparative treatment of Salish reduplication, the more so as the phonetics of most of the material available for comparison are not such as to allow one to make definitive classifications of plural and diminutive types (this remark applies particularly to vocalic quantity and glottal stops, both of which, as we have seen, are important for our present purpose). Certain facts of a comparative nature, however, come out quite clearly and may be briefly noted here.

PLURAL REDUPLICATION. It is evident that all Salish languages make use, like Comox, of different types of plural reduplication. Both types I and II are plentifully illustrated and are without doubt the fundamental Salish processes. Examples of type I are:—

Bella Coola	<i>s-tn</i> tree	plur. <i>s-tntn</i> ¹ (<i>s-</i> , as often in Salish, is prefix)
Tsil'q̓éuk (Cowichan group)	<i>s-kwomái</i> dog	<i>s-kwomkwomái</i> ²
Shuswap	<i>sk'áqa</i> dog <i>nóqonuq</i> woman	<i>s-k'agk'áqa</i> ³ <i>nognoqonuq</i> ³
Okanagan	<i>s-k'elteméq</i> man	<i>s-k'elk'elteméq</i> ⁴
Thompson River mountain	<i>s-k'um</i> <i>s-núkoa</i> friend <i>s-kōum</i> crumpled	<i>s-k'umk'um</i> ⁵ <i>s-nukenúkoa</i> ⁵ <i>s-kōumkōum</i> ⁵

Examples of type II are:—

Nanaimo	<i>s-pál</i> raven <i>s-tálo</i> river	<i>s-pelpá'l</i> ⁶ <i>s-eltá'lō</i> ⁶
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¹ F. Boas, *The Salish Languages of British Columbia*, Report of British Association for the Advancement of Science, 1890, 6th Report on the Northwestern Tribes of Canada, p. 127.

² C. Hill-Tout, Report of British Association for the Advancement of Science, 1902, Report on the Ethnological Survey of Canada, p. 20.

³ F. Boas, *ibid.*, p. 131. *k'* is here and in other forms equivalent to our *q*; *q* to our *z*; *q* to our *z*; *tl* to our *l* (and *L*); *tl'* to our *L*.

⁴ *Ibid.*, p. 135.

⁵ F. Boas, Report of British Association for the Advancement of Science, 1898, 12th and Final Report on the Northwestern Tribes of Canada, p. 28.

⁶ F. Boas, Report B.A.A.S., 6th Report on N.W. Tribes, p. 129.

Shuswap	<i>s-kápk'en</i> head plur.	<i>s-k'epkápqen</i> ¹ (probably misprint for <i>-kepkápk'en</i>)
	<i>k'est</i> bad	<i>ky'eskēst</i> ¹ (probably misprint for <i>-k'est</i>)
Okanagan	<i>s-k'ēlq</i> Indian	<i>s-k'ēlk'ēlq</i> ²
Thompson River	<i>cāenq</i> stone	<i>cēncāenq</i> ³
	<i>s-pam</i> camp fire	<i>s-pēmpám</i> ³
	<i>s-nikiáp</i> coyote	<i>s-nīknikiáp</i> ³ (-i- is very open and short, -i- is close and equivalent to our -i-; hence type IIb)
	<i>s-quasīt</i> to walk	<i>s-qusquasīt</i> ³ (type II c)

An interesting Thompson River example of type II is:—

cirāp tree *cipcirāp*³

An example of type III (reduplicating *-aw-* contracted to *-o-* or *-ō-*), but with retained *-w-* (Comox *-gʷ-*) is:—

Okanagan *tētuwēt* boy *tōtuit*⁴ (based on unre-duplicated form of simplex; final vowel of stem apparently shortened)

This example follows type III b. As illustrating diversity of usage in the treatment of the same stem in different Salish languages, compare with this:—

Lower Lillooet *tu'ū'wut*⁵ boy *tutu'ū'wut*⁵ (-u- is short and close)

This follows type III a, besides which the stem itself seems to differ markedly in regard to vocalic quantity and rhythm from the cognate Okanagan stem. Shuswap agrees better with Okanagan:—

tūwēt boy *tūtūwēt*⁶

¹ *Ibid.*, p. 131.

² *Ibid.*, p. 135.

³ F. Boas, Report B.A.A.S., 12th Report on N.W. Tribes, p. 28.

⁴ F. Boas, Report B.A.A.S., 6th Report on N.W. Tribes, p. 135.

⁵ Some Lower Lillooet linguistic material was obtained in January, 1912, from 1 nace Jacob (Indian name *Visp*).

⁶ F. Boas, *ibid.*, p. 131.

It would seem that type VII, which is only sporadically represented in Comox, is more typically developed in Interior Salish. Examples are:—

Shuswap	<i>tsítq</i> house	plur. <i>tsītsítq</i> ¹
	<i>gīēia</i> old woman	<i>gigiēia</i> ¹
Thompson River	<i>tcítq</i> house	<i>tcitcítq</i> ²
	<i>s-tsuk'</i> picture	<i>s-tsutsúk</i> ²
	<i>s-k'ák'qa</i> dog	<i>s-k'ák'ák'qa</i> ²
	<i>s-pežúzō</i> bird	<i>s-pežezúzō</i> ² (this form, however, may really be diminutive plural, <i>s-pežúzō</i> being diminutive, with final reduplication, of <i>s-pežō</i> "animal," whose plural is normally formed: <i>s-pežpežō</i> , ² type I)
	<i>s-kikeláqoa</i> musk-rat	<i>s-kikikelaqoa</i> ²
Lower Lillooet	<i>tcít'ux</i> house	<i>tcitcít'ux</i> ³
	<i>qō'ə</i> water	<i>qōqō'</i> ³
Note also:—		
Nanaimo	<i>k'únes</i> whale (i.e. <i>qúnēs</i>)	<i>k'ōkuñis</i> ⁴ (probably misprint for <i>-k'uñis</i>)

It is interesting to contrast with this plural (*qōqwuñis* in our orthography) Comox *qwad'qwádi's* humpbacked whales (<*qwan-qwānīs*) of type I. Here again we see the tendency for different Salish languages to form the plural of the same stem according to different types.

Type IX also is illustrated outside of Comox. Examples are:—

Nanaimo	<i>lálēm</i> house	<i>lalálēm</i> ⁴
	<i>wúqas</i> frog	<i>hāuwéqas</i> ⁴ (- <i>u</i> - presumably glide; <i>hāw</i> - dissimilated from <i>*wāw</i> -?)
Tsil'qéuk	<i>méla</i> son	<i>māmela</i> ⁵

¹ *ibid.*, p. 131.

² F. Boas, Report B.A.A.S., 12 Report on N.W. Tribes, p. 28.

³ Obtained from Ignace Jacob.

⁴ F. Boas, Report B.A.A.S., 6th Report on N.W. Tribes, p. 129.

⁵ C. Hill-Tout, Report B.A.A.S., 1902, Ethnological Survey of Canada, p. 20.

Type X is illustrated in:—

Nanaimo	<i>k'ák'en</i> post	plur. <i>k'álak'en</i> ¹ (<i>ā</i> is apparently our <i>ê</i>)
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The last example, with its inserted *-la-*, shows also another method of plural formation, one not found, at least as far as can be judged from available material, in Comox. Other examples of this inserted *-l(a)-* are:—

Nanaimo	<i>há'pet</i> deer	<i>halá'pet</i> ² (type IX)
	<i>tcitc'ek'an</i> mink	<i>tciletc'ek'an</i> ² (type VII)
	<i>spák'em</i> flower	<i>spálak'em</i> ¹
Tcil'qéuk	<i>k'āmi</i> maid	<i>k'ālam</i> ³
	<i>stekēyū</i> horse	<i>stelekēyū</i> ³
	<i>yāsuk</i> hat	<i>yālsuk</i> ³

There seem to be still other types of plural formation in Salish that are not represented in the Comox material given in this paper. One of these is to prefix *-A-* (Boas and Hill-Tout write *-E-*), which may be palatalized to *-i-*, to the stem. Examples of this type are:—

Nanaimo	<i>s-mēyeç</i> deer	<i>s-EMēyeç</i> ⁴
Tcil'qéuk	<i>s-wēeka</i> man	<i>s-iwēeka</i> ³ (<i>-A-</i> palatalized to <i>-i-</i> , <i>-i-</i> by <i>s-</i> ?)

This type is perhaps a reduced form of another one that occurs with some frequency, reduplication with *ca-*. Examples are:—

Tcil'qéuk	<i>láleM</i> house	<i>leláleM</i> ³
	<i>s-mālt</i> stone	<i>s-mEMālt</i> ³
Shuswap	<i>la</i> good	<i>lelā</i> ⁵

Nanaimo *laláleM* "houses," as compared with Tcil'qéuk *leláleM*, suggests, in turn, that *ca*-reduplication is reduced from *ca*-reduplication (type IX). Tcil'qéuk *yēsīām* "chiefs"³ from *sīām* may be dissimilated from **sesīām* (or does *y-* reduplicate *-i-* of stem?). Vocalic changes (*ē* to *ō* and *ā*) are illustrated in:—

Tcil'qéuk	<i>s-wēekātł</i> boy	<i>wōekātł</i> ³
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¹ F. Boas, Report B.A.A.S., 6th Report on N.W. Tribes, p. 129.

² *Ibid.*, p. 128.

³ C. Hill-Tout, Report B.A.A.S., 1902, Ethnological Survey of Canada, p. 20.

⁴ F. Boas, Report B.A.A.S., 6th Report on N.W. Tribes, p. 128.

⁵ *Ibid.*, p. 131.

<i>s-wēwilus</i> youth	<i>s-wāwilus</i> ¹ (this may be considered, however, as formed from unreduplicated simplex according to Type IX)
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With the latter example compare Comox *wē'wāloš* "young men" from *wē'wāloš*.

To sum up, it is clear that there are a number of wide-spread Salish methods of forming the plural, which may, however, at last analysis turn out to be capable of reduction to Type I (of which Type II may be a reduced form). It is conceivable that sub-types, which have developed in particular cases from this by secondary phonetic processes (cf., e.g., Comox Types III and VIII), set the pace for new purely analogical, not etymologically justifiable, forms, so that now any one Salish language exhibits great irregularity. Certain of these secondary types seem to be favoured in one language, others in another, so that, as we have seen, the same stem is sometimes differently treated in different languages. To unravel the history of reduplicated (and other) plurals in Salish, however, requires a far more abundant body of material, for purposes of comparison, than has as yet been made accessible.

DIMINUTIVE REDUPLICATION. The last remark applies even more forcibly to the study of Salish diminutive formations, for here there is a still greater variety of types represented. Available comparative data are quite scanty, so that only a few points can here be referred to. The most consistently carried out difference between plural and diminutive reduplication in Salish is that in the former the first two consonants of the stem (though not infrequently only the first) are reduplicated, while in the latter only the first is reduplicated, never also the second. At the same time there is a marked tendency, as in so many Comox examples, for vocalic reduction of the stem. Reduplication with *ē*-vowel seems also characteristic of many forms; also breaking of stem vowel and umlaut of *a* to *ē* or *ē* seem to be found.

Some of the types represented, outside of Comox, are:—

¹ C. Hill-Tout, Report B.A.A.S., 1902, Ethnological Survey of Canada, p. 20

Type X.

Nanaimo	<i>lálēm</i> house	diminutive <i>lélēm</i> ¹ (based on unreduplicated simplex)
Okanagan		<i>hélhōtēm</i> little girl ² (<i>H</i> = our <i>x</i> ^v)

Type XII.

Nanaimo	<i>wúqas</i> frog	<i>wéwēqas</i> ³
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Type XIX a.

Nanaimo	<i>k'ák'en</i> post	<i>k'ák'k'en</i> ³
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Type XXI a.

Shuswap	<i>pasítlkua</i> lake	<i>papsítlkua</i> ⁴
Thompson River	<i>s-núkoa</i> friend	<i>núnkoa</i> ⁷

Type XXIII.

Tcil'qéuk	<i>s-tálō</i> river	<i>s-tátelō</i> ⁵
Nanaimo	<i>s-tá'lo</i> river	<i>s-tátelō</i> ⁶

Type XXVI a.

Nanaimo	<i>s-púk'em</i> flower	<i>s-pápk'em</i> ⁶
Comparable perhaps to Comox Type XXX a is:—		
Thompson River	<i>s-péé'tc</i>	<i>s-pápaats</i> ⁷ (<i>-aa</i> = <i>-a'a</i> ?)
	black bear (<i>é</i> = our <i>e</i>)	

Other diminutive types than those listed for Comox undoubtedly exist in Salish. Among these is reduplication with *ca-* (cf. plural types above), as examples of which may be given:—

Thompson River	<i>c-mēits</i> deer	<i>c-mēmēits</i> ⁸
Tcil'qéuk	<i>lálēm</i> house	<i>lélám</i> ⁹ (based on unreduplicated form of simplex; change of <i>-e-</i> to <i>-ā-</i> is perhaps parallel to that of Comox <i>-a-</i> to <i>-ī-</i>)

¹ F. Boas, Report B.A.A.S., 6th Report on N.W. Tribes, p. 129.

² C. Hill-Tout, *Report on the Ethnology of the Okanāk'en of British Columbia*, Journal of the Royal Anthropological Institute of Great Britain and Ireland, vol. xli, 1911, p. 143.

³ F. Boas, *ibid.*

⁴ Boas, *ibid.*, p. 131.

⁵ C. Hill-Tout, Report B.A.A.S., 1902 Ethnological Survey of Canada, p. 20.

⁶ Boas, *ibid.*, p. 129.

⁷ Boas, Report B.A.A.S., 12th Report on N.W. Tribes, p. 29.

⁸ Boas, *ibid.*

⁹ Hill-Tout, *ibid.*

Similar apparently to Comox type VII (but without diminutive feature 2a), except for its incomplete reduplication (loss of reduplicating consonant after *s*-, cf. plural types above), is:—

Teil'qéuk s-mält stone diminutive s-emelét¹

Reduplicating with *cǔ-*, and with breaking of stem-vowel, is:—

Thompson River KEs bad $KEKEES-t^2$ ($= -kA'AS$)

This type may well exist in Comox, but not happen to be represented in the material collected. Such diminutive forms as Thompson River *qezúzum*¹, with interior reduplication, from *qzúm* "large," and Thompson River *speyúzu*¹, with change of -z- to -y-, from *spezúzu* "bird," are evidently representatives of very specialized types. Neither of these, so far as known, has a Comox counterpart.

Judging from the analogy of Comox and from a few Interior Salish forms obtained by the writer, it seems very likely that glottal stops are frequently employed in Salish as diminutivizing elements, though this is not apparent from most of the material that has been published. Examples are:—

Upper Lillooet³ *s-múłátc* woman *se-m'ém'letc* girl

Thompson River⁴ *c-múlätc* woman *c-mú'm'lätc*

(type XXVIa)

Comparative data on diminutive plurals are too scanty to enable us to gather much of interest. Some Interior Salish forms obtained by the writer seem to indicate quite clearly that in those languages the diminutive plural is not, as in Comox, a diminutivized plural, but a pluralized diminutive; in other words, of the two reduplicating syllables, the first contains the first two consonants of the stem (plural type), the second syllable the first consonant only (diminutive type). Examples are:—

Upper Lillooet plur. *s-mulmû'lätc* dim. *se-m'ém'letc* girl
women

dim. plural

SE-mEł' m'Em'łetc

Thompson River *c-mulmúłätc*

dim. $c\text{-}m\hat{u}'m'l\hat{a}tc$

women

dim. pl. *c-mEt mû' m' tât c*

¹ Hill-Tout, *ibid.*

² Boas, *ibid.*

³ Upper Lillooet forms were obtained in January, 1912, from Chief Jim (Indian name *Aid¹sq¹l*). *ε* has here been used to indicate very short obscure vowel of undefined quality.

⁴ Some Thompson River forms were obtained in January, 1912, from Chief Tetlenitsa.

This difference of treatment again indicates that in many respects each dialectic division of Salish has gone its own way in the use of morphologic features common to Salish generally.

